Ontario

Municipal Performance Measurement Program

Summary of 2002 Results

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Municipal *Performance* Measurement Program

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This report summarizes Municipal Performance Measurement Program (MPMP) results contained in the Financial Information Return for the 2002 and 2001 reporting years. It summarizes data reported by municipalities as of May 2004 and does not reflect subsequent changes in data by municipalities or returns submitted at a later time. Outlying results, including results that appear to contain an error in calculation, are not included in the summary statistics in order to provide more representative statistics. The report should not be relied on as a substitute for legal or professional advice, and the user is responsible for how the report may be used or applied.

Municipal performance measures are authorized under the *Municipal Act, 2001*. Every year the minister writes to municipalities, informing them of the formal requirements of the program, including a list of performance measures. The minister's letter and the annual list of performance measures are posted on the ministry's web site at www.mah.gov.on.ca under the heading, Municipal Performance Measurement Program.

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Part I:
Municipal Performance Measurement Program (MPMP)

Foreword

This document reports Municipal Performance Measurement Program results for 2002, the third year of the program.

Municipalities report performance measurement results annually to the public. Municipalities themselves are interested in how they stand relative to similar municipalities and many have been comparing performance measurement results on an informal basis. There has also been interest in a comprehensive survey of results done in a way that does not single out any individual municipality. The solution has been to group municipalities by geography and population and prepare summary statistics for each group.

This report is targeted at municipal administrators, elected officials and members of the public interested in a detailed presentation of performance measurement results and the factors affecting those results. The report is intended to enhance discussion about municipal service delivery and prompt municipalities to investigate best practices, such as those compiled by the Ontario Centre for Municipal Best Practices.

This is the second report summarizing Municipal Performance Measurement Program results and we encourage you to explore the document. Please address any comments to:

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Program

Many services Ontarians use and enjoy each day, including drinking water, fire protection, policing, garbage collection, recycling, roadways and public transit are provided by municipal government. Municipal councils are responsible for setting priorities on how tax dollars will be spent, including how much will be spent on each service area and what level of service is feasible for the available money. Decisions also reflect regulatory requirements and the need to limit municipal risk.

All Ontario municipalities share in the commitment to provide their taxpayers with good services and good value for money. But how can taxpayers, municipal councillors and municipal administrators evaluate municipal services?

One solution is to track a municipality's own performance year after year. Another approach is to compare the municipality's results with those of other, similar municipalities.

Municipalities have a long history of reporting financial and statistical information to the province following the end of every calendar year. From this information we know how much a municipality spends on broad service areas like fire protection or garbage collection. But, this does not provide insight into how efficiently or effectively the municipality delivers services or local circumstances.

To provide municipal administrators, residents and municipal councils with information that can help them evaluate service delivery, the Ontario government introduced a new and innovative program to measure municipal performance in 2000. The Municipal Performance Measurement Program (MPMP) is the first comprehensive program of its kind in North America. In 2002, all Ontario municipalities provided information on the efficiency and effectiveness of municipal services in ten key areas:

- Municipal government
- Fire protection
- Police services
- Roadways
- Public transit
- Drinking water
- Wastewater (Sewers)
- Storm water management
- Solid waste
- Land use planning

These service areas were selected initially because they are primarily a municipal responsibility and represent a high percentage of the municipal budget. Another consideration was that municipalities already collect most of the data needed to calculate performance measures for these services.

Advisory Committee

At the end of the first year of the program, the Ministry of Municipal Affairs formed a Municipal Performance Measurement Program Advisory Committee to guide the development of the program. The Advisory Committee consists of representatives from municipal associations such as the Association of Municipalities of Ontario, the Ontario Municipal CAO's Benchmarking Initiative (OMBI), the Ontario Centre for Municipal Best Practices (OCMBP) and staff from a group of representative municipalities. Specialized working groups annually review the performance measures and make recommendations to redefine and improve the measures and instructions.

Municipalities Report Results to the Public

Every year, every municipality provides information on its performance measurement results to the province and its residents. Many municipalities provide performance measurement information on their web sites. Others take out newspaper ads, mail the information or include performance measurement information in the property tax bill. The objective is for municipalities to share information with taxpayers. This can enhance conversations between taxpayers and their elected representatives about local priorities and results.

Benefits

The benefits of reporting performance measurement results to the public are significant: ranging from improved accountability to improved service delivery. How? Reporting to the public should generate public interest in the decisions council makes, encouraging further communication. Municipalities are interested in how other municipalities are doing, generating informal comparisons and discussions about the details of service delivery.

Table 1: Benefits of Municipal Performance Measurement Program

Municipal Performance Measurement Program

What MPMP is:

- **Management tool.**
  Municipalities can track performance over time.
- **Comparable.**
  Standardized definitions and formulas for performance measures make comparisons possible between municipalities.
- **Balanced information.**
  Information is provided on both service quality and costs for most services.
- **Universal.**
  All Ontario municipalities responsible for a service report performance measures on that service.

What performance measurement encourages:

- **Accountability.**
  Reporting to the public improves municipal government accountability to taxpayers.
- **Communication.**
  Encourages discussion between taxpayers and council.
  Encourages discussions between municipalities.
- **Priority setting.**
  Performance measures can assist council in setting priorities and allocating tax dollars to services in the municipal budget.
- **Monitoring the municipal budget.**
  Performance measures help monitor whether budgeted costs and expected service levels are met.
- **Focus.**
  Attention is focused on results, leading to closer review of how service is delivered, how well it is delivered, what it costs and impacts on the community.
- **Setting targets.**
  Improvements in performance can occur simply by setting clear, measurable targets.
- **Best practices.**
  Performance measures are a starting point for identifying best practices, such as those researched and identified by the Ontario Centre for Municipal Best Practices.
- **Improved service delivery.**
  Improved communication, setting targets, comparisons, a focus on service, and access to a directory of best practices can lead to improved service delivery.

Performance measures focus on results and can help council evaluate how well budget decisions achieved municipal goals. Municipal staff can translate goals into performance measurement targets. Performance relative to goals can help council determine whether to reallocate tax dollars between competing services.

Simply measuring a service in a regular, consistent manner focuses attention on a service and this focus is the beginning of service improvements. Improvements can take the form of lowering the cost of service delivery, changing the level of service or finding a better way of doing business.

Best Practices

Performance measures are also a starting point for the identification of municipal best practices. The Ontario Centre for Municipal Best Practices has developed a virtual electronic library of best practices. The Centre uses Municipal Performance Measurement Program results as a starting point for identifying municipalities for in-depth follow-up. The Centre researches, identifies and posts best practices on their web site: www.municipalbestpractices.ca. Municipalities are encouraged to review the practices posted and determine which are applicable to their own circumstances. This encourages the transfer of operational experience between municipalities.

Measuring Both Efficiency and Effectiveness

Performance measures look at two dimensions of service delivery—efficiency and effectiveness.

Efficiency measures provide information on the cost of delivering services. For example, we can measure the day to day costs of treating drinking water. This provides a standard measurement that applies to all municipalities, regardless of population.

However, efficiency measures tell only part of the story. Residents also want to know about the quality of service. Effectiveness measures describe performance relative to a goal. For drinking water, municipalities report the weighted number of days when a boil water advisory, issued by the Medical Officer of Health and applicable to a municipal water supply, was in effect. Together, the efficiency and effectiveness measures provide a more complete picture of what is spent and what is achieved given local conditions.

Many municipalities include a brief description of local circumstances in their report to taxpayers. Local circumstances affect results and should be considered in any comparison of outcomes between municipalities. For example, geography and micro-climate are factors influencing the efficiency and effectiveness measures for winter maintenance of roadways.

Table 2: How to Tell Efficiency & Effectiveness Measures Apart

How to Tell Efficiency & Effectiveness Measures Apart

Efficiency measures

- **Often described as inputs/outputs.**
- **Inputs are usually dollars.**
- **Often expressed as cost per unit.**

  Operating costs for paved roads per lane kilometre.
  Operating costs for solid waste diversion (recycling) per tonne or per household.

Effectiveness measures

- **Measure quality.**
- **Measure extent to which a goal is achieved.**
- **Often expressed as a percentage.**

  Percentage of paved lane kilometres where the condition is rated as good to very good.

  Percentage of residential solid waste diverted.

- **Also expressed as a rate using 2 different kinds of units.**

  Property crime rate per 1,000 persons.

  Number of conventional transit passenger trips per person in the service area in a year.

Who Reports a Measure

Under the Municipal Performance Measurement Program, municipalities complete a measure only if their level of government is responsible for the service. For example, if a regional municipality in Southern Ontario is responsible for wastewater treatment, only the regional municipality reports the measure. Local area municipalities do not report the measure. If both the regional government and the local government share responsibility for delivering a service, such as winter maintenance of roadways, both the region and the local area municipalities report the measure.

In both the North and South, single-tier municipalities are responsible for all municipal services delivered to residents, with the exception of social and health services delivered by Consolidated Municipal Service Managers or District Social Services Administration Boards. Regardless of whether single-tier municipalities contract out a service, provide it jointly with other municipalities or provide it in-house, they report performance measures which correspond to the services they deliver.

Table 3: How to Present MPMP Results?

How to Present MPMP Results?

Challenge

How to report results in a way that does not identify individual municipalities?

Solution

- Group municipalities. Municipalities already report their own results to the public. Emphasis on aggregate results encourages municipalities and the public to explore why a municipality's own performance varies from the median.

Challenge

How to create groups that allow taxpayers to instantly locate their municipality?

Solution

- Group municipalities by North and South.
- In South, create separate groups for regional municipalities, counties and single-tiers.
- Group single-tiers by population; group lower-tiers by population.
- Also, calculate statistics for all municipalities reporting a measure.

Presenting Results for 2002

Municipalities are required to report results to their taxpayers annually. However, there has also been interest in a comprehensive survey of results done in a way that does not single out any individual municipality. Municipalities are affected by many local factors such as demographics, geography, urban/rural mix and assessment base. By grouping municipalities by geography, municipal type and population, it is possible to see patterns in results. The range and median allow municipalities to compare their own results with other, similar municipalities.

How to Find Your Municipality's Group

Table 4: Municipal Groups Used in 2002 Summary

Municipal Groups	Number of Municipalities
North	
<5,000	129
5,000 – 19,999	14
40,000+	4
South	
Regions and former regions	12
Counties	22
Single-tiers	
Separated Towns/Twp	5
Separated Cities <100,000	17
Separated Cities 100,000+	4
Lower-tiers	
<5,000	69
5,000 – 9,999	71
10,000 – 19,999	64
20,000 – 39,999	15
40,000 – 99,999	11
100,000+	11
All Municipalities	448

To evaluate results, two major groups were established: Northern Ontario and Southern Ontario. Northern Ontario can be distinguished from Southern Ontario on many dimensions. It is primarily rural, is characterized by more dispersed settlement patterns, and higher costs for municipal service delivery relative to Southern Ontario.

Northern municipalities are organized as single-tier municipalities with the exception of the District of Muskoka. In the Summary of Results, Northern municipalities are divided into three population groups. Note that there were no municipalities with populations between 20,000 and 40,000 in 2002.

In the South, several forms of municipal government exist: single-tiers, upper-tiers (regions and counties) and lower-tiers or local municipalities. Please see a discussion of municipal government structure in the section, In Depth—Municipal Government Structure.

Because upper-tier governments and single-tier governments have responsibilities distinct from local area municipalities, separate groups have been created for them. The group called "regions and former regions" includes the following single-tier municipalities which were previously regional governments: Toronto, Ottawa, Hamilton, Greater Sudbury, Haldimand, Norfolk.

The District of Muskoka and the City of Greater Sudbury are located in the North but have traditionally been included in Southern Ontario for purposes of ministry financial analysis. Note that the District of Muskoka has a two-tier regional style government although it is described as a District.

Also, the County of Oxford functions as a regional municipality and has traditionally been analyzed with regional municipalities. It is therefore included in the group, regions and former regions.

In the 2002 Summary of Results, separate groups have been created for single-tier municipalities and for lower-tier municipalities based on population. Summary statistics for 2001 MPMP results have been recast using these groups to allow comparisons between 2001 and 2002.

By organizing results by geography, municipal type and population, the user can immediately determine where his/her own municipality is and how results for the group compare with the results published by the municipality.

Measures Refer to a One Year Time Period

Performance measures are based on data for a one year period—the calendar year. The calendar year is used because it corresponds to the municipal fiscal year. As an example, the property crime rate per 1,000 persons is based on the number of actual incidents of property crime reported during the reporting year. A few measures specifically refer to the one year time frame in the description of the measure, but most do not. An example of a measure that refers to a year is the number of wastewater main backups per 100 kilometres of wastewater main in a year. In this measure, the year reference is added to clarify that data is based on a one year period as opposed to one month.

There are two exceptions concerning planning measures for the preservation of agricultural land. These measures are based on changes in hectares between the reporting year and the base year of 2000. The longer time frame makes it possible to see the impact of changes in land use.

Table 5: Check List for Comparisons

Check List for Comparisons	
Local Circumstances	**Demographics and Physical Characteristics of Municipality.** ✓ Population and population growth. ✓ Demographics. ✓ Geography: North/South. ✓ Urban/Rural. ✓ Climate. **Local Cost of Doing Business.** ✓ Local wage rates, cost of materials, cost of transportation, whether there is a competitive market for service providers. ✓ Contract provisions. **Other Circumstances.** ✓ See notes to Municipal Performance Measurement Program results reported by municipality to taxpayers.
Council Decisions and Budget	**Council Decisions on Service Level.** ✓ Service level. ✓ Whether service is delivered to all or part of municipality. Example: sanitary sewer service provided only to urban areas. **Council Decisions on How Service is Delivered.** ✓ In-house, contracted out, joint service agreements with other municipalities, etc. **Municipal Budget.** ✓ Size of municipal budget. ✓ Assessment base including residential, farm and commercial/industrial mix. Assessment growth.
Municipal Structure	**Municipal Responsibilities Differ with Structure.** ✓ Municipalities with different municipal structures have different responsibilities. Similarly, regions that became single-tiers have added responsibilities although they are grouped with former regions. **Two-tier Government in South and Shared Responsibility.** ✓ If responsibility for a service is shared by two levels of government in a two-tier system in Southern Ontario, the services performed will influence operating costs and efficiency results.

Check List for Comparisons

Service Area Measured	**Factors Specific to Each Service.** ✓ See list of factors for every measure. **Age of Infrastructure.** ✓ An aging infrastructure may result in higher costs for repairs and rehabilitation; effectiveness measures may be influenced. Example: paved roads.
Reporting Issues	**Reporting in Financial Information Return.** ✓ Method of allocating indirect costs included in general government to other services. ✓ Whether administrative costs for a department are included. Example: Are administrative costs for the transportation department included in the cost of paved roads? ✓ Whether a municipality makes transfer payments between departments and records these as interfunctional adjustments in the Financial Information Return. ✓ Errors in reporting, including errors in calculations, e.g. megalitres of water. ✓ Data estimated versus data precisely measured.
Summary Statistics	**Number of Municipalities Reporting a Measure.** ✓ If few municipalities report a measure, results have limited use for comparisons.

Making Comparisons

Municipalities have been placed into groups that recognize geography, municipal type and population. This helps encourage comparisons between similar municipalities. Table 5 provides a more detailed look at the factors that should be weighed when considering which municipalities should be compared to your municipality. The Check List for Comparisons is organized into six areas: local circumstances, council decisions and budget, municipal structure, service area measured, reporting issues and summary statistics.

Service level decisions are crucial and are linked to the size of the municipal budget. Municipal budgets are themselves linked to the assessment base on which property taxes are levied. There are significant differences between municipalities which reflect the mix of residential, farm, commercial and industrial properties.

Financial reporting practices, including the treatment of indirect costs also have a significant impact on results. Please see the In-depth feature on indirect costs.

Statistics

For the province as a whole and for each group of municipalities, the median, range and number of municipalities reporting a measure are presented. These statistics allow a municipality to evaluate its own results relative to those of other municipalities. The median result for 2002 is shown as a bar graph. A frequency distribution is also included to provide an overview of the results from all municipalities. In order to report meaningful results, the data set used to calculate these statistics excludes municipalities which have outlying results or appear to have made an error in calculation.

Range

The range measures the spread of the data. The range is presented as the minimum or lowest value, and the maximum or highest value.

Median

While people are familiar with averages, the median provides a statistic that measures the middle value in a group, without being influenced by extreme values.

In a data set which is ordered from low to high, the median is the measurement in the middle. Half the measurements will be below the median and half will be above it.

Evaluating Results

Superior results will vary with the measure. For efficiency measures, results below the median will represent lower costs per unit. For effectiveness measures, the best results could be either higher or lower than the median. For the measure, violent crime rate per 1,000 persons, a result below the median will represent a better outcome. For the measure, percentage of residential solid waste diverted, a result above the median will represent a higher percentage of solid waste recycled.

Number of Municipalities Reporting the Measure

The number of municipalities reporting a measure varies from measure to measure. The number excludes municipalities with outlying values and those which appear to have made an error in calculation. Conditions used to evaluate data are described in the results table for each measure.

Before comparing the median result with your municipality's result, it is important to know how many municipalities in the group reported the measure. When only a small number of municipalities report a measure, the summary statistics will be less reliable for making comparisons.

If the number of municipalities in a group is small, the median may be significantly affected if the number of municipalities reporting a measure changes from one year to the next.

Frequency Distribution

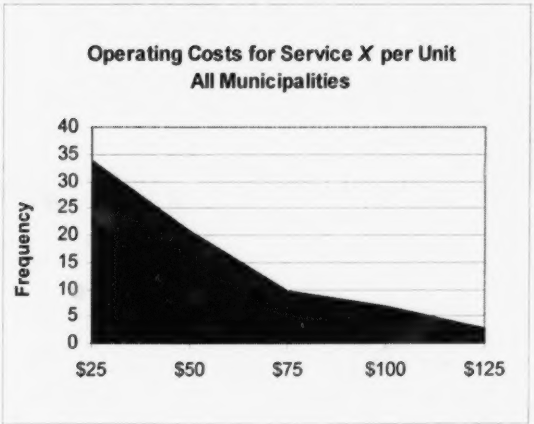
Each measure is graphed as a frequency distribution in order to show how all the results are concentrated. In a frequency distribution, results are arranged in groups and the number of results within each group is counted (frequency).

Example: 75 municipalities report an efficiency measure and the data ranges from $2.04 per unit to $121.50 per unit. Equal intervals are created to accommodate the range of data. Next, the number of results that fall within each interval is counted—this is the frequency.

Intervals	Frequency (count)	Label on x-axis
$0.00 to $25.00	34	$25
$25.01 to 50.00	21	$50
$50.01 to 75.00	10	$75
$75.01 to $100.00	7	$100
$100.01 to $125.00	3	$125

The frequency distribution is graphed in Figure 1.

Figure 1: Example of Frequency Distribution



The number of municipalities reporting results within each interval is reported on the y-axis. The intervals representing unit cost are shown on the x-axis. The highest value in each interval is represented.

Looking only at the graph, we can see that about 34 municipalities had unit costs between $0.01 and $25.00. Around 20 municipalities had unit costs between $25.01 and $50.00.

Note that a frequency distribution will vary from measure to measure because it reflects the data actually reported by municipalities. As a reference, a "normal distribution" is symmetrical and resembles a bell.

For a few effectiveness measures, where municipalities may report a result of zero, the first interval in the frequency distribution is zero. An example is the weighted number of days when a boil water advisory is in effect. For all other measures, the first interval is represented by the highest value in a group. For example, if an interval contains all values from $0.00 to $25.00, the interval is represented as $25.00 on the x-axis. The second interval is represented as $50.00 and contains all values from $25.01 to $50.00.

Graphs, Tables and Explanations

Results for each measure are displayed as a table, a bar graph and a frequency distribution. See the beginning of the DATA section for a discussion of how to read the results. In Part II, Summary of 2002 Results, the section for each service area contains the objective of the measure and a list of factors that influence results. Municipalities themselves described these factors in the notes accompanying the performance measurement schedules in the Financial Information Return.

☛ **TIP:** Performance measures are fractions.
Look for the formula for each measure.

Sifting Through the Raw Data

The raw data reported for each measure is examined for errors before it is included in the Summary. Staff looked for errors in the reporting of the numerator and the denominator. Errors in either can lead to artificially low or high results.

If a result appeared unusual, staff checked the Notes schedule and the schedule on cross boundary service delivery for additional explanatory information. If no explanation was provided for the "outlier", the result was excluded from the statistics for the measure. The performance measure was also earmarked for follow-up by ministry staff.

Following Up Performance Measurement Results

Trend Over Time

Most performance measures reported for the 2002 reporting year use the same formulas and definitions as the measures for 2001 This means municipalities can begin to track their own performance over time. However, if a municipality changed its method of allocating indirect costs in 2002, then results for 2001 and 2002 are not directly comparable. Please see the section entitled In-Depth—Indirect Costs.

Trend over time is a valuable analytical technique. Municipal performance normally does not change radically from year to year. Instead, it tends to change gradually, either positively or negatively. The cumulative effect of small changes can indicate a trend that should be followed up.

Differences in Aggregate Statistics between 2001 and 2002 Summary Reports

Municipal groups in Southern Ontario were re-defined to group single-tier municipalities together and lower-tier municipalities together. This will affect aggregate statistics for groups.

Changes in conditions used to eliminate outlying values will affect the number of municipalities reporting the measure, subject to conditions, and the aggregate statistics.

Factors that Affect Year Over Year Results

- Changes in the method of allocating program support. The general government category of program support represents indirect costs for functions used by all municipal departments.
- Closer scrutiny of the way expenditures are reported in Schedule 40, Revenue Fund Expenditures, leads to changes in reporting. For example, if a municipality historically included winter control on the line for roadways in Schedule 40, reporting the winter control separately can lead to more accurate reporting and changes in efficiency measures.

- A change in the number of municipalities reporting a measure from one year to the next will affect the median for the municipal group.
- Correction of errors in units without recasting previous years.
- Change in municipal priorities that results in a change in the amount budgeted for a service area.
- Change in service level.
- Change in service provider.
- Change in labour costs.
- Winter weather patterns affect winter control measures and affect the maintenance of paved and unpaved roads.
- Rainfall may affect wastewater and storm water management measures.

Comparing Municipal Performance to Summary Statistics

The median and range can help a municipality position its results relative to other municipalities in the North or South of similar population size. The frequency distribution can help a municipality locate itself relative to all municipalities reporting the measure.

Efficiency Measures are "Broad Brush" Measures

In the Municipal Performance Measurement Program, efficiency measures are based on overall costs for broad service areas: fire services, conventional transit, garbage collection, etc. These macro measures provide an indication of the overall cost per unit. Over time, a trend may become evident. Further investigation in required to determine why spending per unit has changed. In short—performance measures help identify areas that need attention.

Results: What Do They Mean?

Snap judgments suggesting that results are simply good or poor are not appropriate in performance measurement. A municipality needs to determine why performance exceeds expectations or falls below expectations. Both kinds of results are worth investigating. Certainly, a municipality would be interested in performance that was below expectation because it would want to discover ways to improve results. But it should be equally interested when performance exceeds expectations because it would want to repeat good performance and identify practices that it could copy elsewhere in its operations.

Trade-offs between Efficiency and Effectiveness

Spending trends should be viewed in tandem with effectiveness results. If spending per unit has decreased over time, what is the corresponding impact on effectiveness results?

Evaluating both efficiency and effectiveness results can highlight trade-offs between spending and service quality. There are several ways to balance cost and quality:

- Increasing effectiveness by spending more – higher cost per unit.
- Increasing effectiveness while holding cost per unit constant or reducing cost per unit.
- Keeping effectiveness constant while reducing cost per unit.
- Increasing efficiency by reducing effectiveness standards or service levels to reduce cost per unit.

Most municipalities are likely to find the second method the most preferable and the last method the least preferable, but all methods represent opportunities for balancing cost and quality.

Setting Municipal Performance Targets

Municipalities may set local targets for efficiency and effectiveness results. Setting performance targets does not mean that a standard will always be met. But it does mean that a process of target setting and monitoring is put in place. Measuring a service focuses attention on it and this attention can lead to improvements. Simply put—what gets measured, gets done.

Targets are affected by local circumstances and should be realistically set. When setting targets for the next fiscal year, municipalities should consider their long-term strategic plans, how much money is available, council's policy priorities, service demand and local circumstances.

IN DEPTH

Reporting Data to the Province

Data for the Municipal Performance Measurement Program is collected through the Financial Information Return (FIR) submitted annually by municipalities to the province. The Financial Information Return includes separate sections for efficiency (Schedule 91) and effectiveness (Schedule 92). A special section for notes (Schedule 93) allows municipalities to qualify their information and explain local circumstances that may have influenced efficiency and effectiveness results. A section is also provided on cross boundary service delivery (Schedule 95). This helps clarify the level of government responsible for a service and any contractual or joint service agreements between municipalities. Additional data, such as the number of kilometres in the municipal road system, is collected and assists in verifying data in the numerator and denominator (Schedule 94). Detailed instructions for completing these schedules is provided to municipalities.

Edit Rules

Edit rules are formulas built into the Financial Information Return that check entries. Edit rules have been created specifically for the efficiency and effectiveness measures. An error message is triggered if an inconsistency is detected or important information is not reported. Edit rules allow a municipality to self-correct an entry before the Return is submitted to the province and contribute to the overall accuracy of the Financial Information Return.

Although edit rules identify many errors, they cannot identify all mistakes. There may also be legitimate reasons why a result is higher or lower than the results for other municipalities in the same group. Explanatory notes in the performance measurement section of the Financial Information Return can help ministry staff determine whether an outlying result is legitimate or due to a calculation error.

In Part II, Summary of 2002 Results, tables and graphs are provided for each measure. Each table includes a list of conditions used to exclude errors and outliers.

Local Quality Assurance Issues

A variety of quality assurance activities occur in a municipality prior to submitting data for performance measurement in the Financial Information Return. Considering the factors in Table 5, each municipality compiles data using a variety of processes and review procedures that allow staff to assess the quality, completeness and accuracy of reported results. As these processes and the related performance reporting standards and tools evolve, summary reports like this one will provide new insights and more insights about performance.

IN DEPTH

Efficiency Measures: Operating costs

In the Municipal Performance Measurement Program, efficiency measures are usually expressed as cost per unit and are based on operating costs only.

Capital costs are not included because municipalities are required to expense all capital costs in the year in which an asset (land, equipment, buildings) is acquired. Capital costs also include major construction projects such as roadways or sewer systems. From year to year, capital expenditures may seem uneven, inflated in some years, low or non-existent in others. In the future, it is expected that municipalities will report capital assets on the balance sheet, and depreciate them every year. At that time, depreciation related to capital costs could be logically included in efficiency measures.

For each service, information is collected in the Financial Information Return using these operating cost categories:

✓ Salaries, wages and employee benefits.
✓ Materials.
✓ Contracted services.
✓ Rents and financial expenses.
Transfers to own funds (reserves, reserve funds, capital fund).
External transfers (to individuals and organizations).
✓ Interfunctional adjustments (transfers between departments and overhead allocated to other services).
Principal and interest payments on long term debt.

The costs marked with a ✓ are used to calculate the numerator for the efficiency measures which is simply described as "operating costs". Note that principal and interest payments on long term debt and transfers to own funds are not included in the definition of operating costs. Consequently, the way a municipality funds its capital projects does not influence performance measurement results.

External transfers are payments which are beyond the control of the municipality, such as general welfare assistance. Therefore, these costs are excluded.

Costs are Reported on a Gross Basis

Operating costs are reported on a gross basis for the efficiency measures. This means that revenues from user fees and grants from the provincial and federal governments are not subtracted from operating costs. User fee policies also vary from municipality to municipality. If user fees were netted out, those municipalities with a policy of extensive user fees would appear to have lower costs per unit.

Provincial grants include grants for specific services as well as unconditional grants which may be used as the municipality sees fit to meet municipal priorities. Grants differ from municipality to municipality and grant policies change over time. Also, unconditional grants cannot be matched to a specific service. Therefore, grants are not netted from expenditures.

Exception: Netting Out Revenues Received from Other Municipalities

Under the Municipal Performance Measurement Program, if a municipality is responsible for delivering a service, the municipality reports the related performance measures. Some municipalities are responsible for a service, but choose to purchase the service from another municipality and enter into an appropriate contractual agreement. The municipality that acts as a service provider receives payment, or revenue, for its services. This municipality is permitted to subtract the revenue received from other municipalities from its operating costs.

Exception: Netting Out Revenue from the Sale of Resources Related to Garbage Disposal and Recycling

The working group of municipal staff experts that reviewed the solid waste measures felt that solid waste contracts within the municipal sector had an important component related to the sale of resources. The sale of resources related to disposal and diversion activities includes electricity production and landfill gas, landfill gas credits and royalties. Typically, contractors keep revenue from the sale of resources related to disposal and diversion activities as part of the contract. Therefore, revenue from the sale of resources is subtracted from operating costs for the solid waste measures for disposal, diversion and solid waste management. Note that tipping fees and user fees for garbage collection are not netted from operating costs since user fees are not netted out from operating costs for other service areas.

IN DEPTH

Indirect Costs

Indirect costs are costs for services that are used by many departments of a municipality. Typically these include human resources, payroll, mailroom, etc. How indirect costs are allocated to different service areas can have a material impact on efficiency results. Indirect costs can be reported under general government or they can be included in the costs of each service area.

Before Municipal Performance Measurement Program (MPMP) schedules were added to the Financial Information Return, there was no policy concerning the treatment of indirect costs. It was left to each municipality to decide whether to include indirect costs in the cost of general government or include them in the cost of individual services. If a municipality chose to allocate indirect costs to services, it could use any allocation method.

When MPMP was introduced, it became very important to standardize the way municipalities handled indirect costs. Otherwise, a municipality that reports all indirect costs as part of general government will have high operating costs for general government. This will affect efficiency results—increasing operating costs for governance and corporate management as a percentage of total municipal operating costs. In addition, the municipality will have lower operating costs for other services and lower costs per unit.

Standardizing the Allocation of Indirect Costs

The ministry recognized that the treatment of indirect costs would need to be standardized to enable true comparisons of efficiency measures. The ministry examined methods for allocating indirect costs and reviewed how general government costs were reported. The ministry was particularly interested in the work being done by the Ontario Municipal CAO's Benchmarking Initiative (OMBI). OMBI proposed dividing general government costs into three categories:

- Governance.
- Corporate management.
- Program support.

Program support was defined as indirect costs that should be allocated to other service areas. Examples include information management, payroll, printing and graphics. Corporate management was defined as administrative costs that are less easily allocated. Examples include legal support, investments and corporate communication. OMBI recommended corporate management not be allocated to other services.

OMBI also proposed that large municipalities use a method of allocating indirect costs based on the consumption of different program support services by municipal departments. For example, each department would be allocated a percentage of the costs of printing services—based on the number of impressions it ordered. These concepts were accepted and are being phased in.

Table 6: Moving to Standardized Reporting of Indirect Costs

Moving to Standardized Reporting of Indirect Costs

2001

- Transition year.
- Municipalities choose a set of general government categories:
  1. Members of council, general government support, corporate overhead; OR
  2. Governance, corporate management, program support.
- Municipality reports the efficiency measure for general government that matches the general government categories used.
- Municipalities asked to allocate general government costs to other services. Amount allocated reflects general government categories used. If categories include members of council, then the subtotal for general government costs is allocated; if categories include governance, then program support is allocated.
- Municipalities free to choose the method of allocating general government costs.

When making comparisons, please be aware that differences in general government categories and differences in the method of allocating general government costs affect results.

2002

- All municipalities required to use the general government categories of governance, corporate management and program support.
- All municipalities are to allocate program support to other services.
- Municipalities with populations of 100,000 or more to use their best efforts to use the OMBI allocation method.
- Municipalities with populations under 100,000 are to use an allocation method based on operating costs for a service area as a percentage of total municipal operating costs.

IN DEPTH

Municipal Government Structure

The *Municipal Act, 2001* recognizes three types of municipalities: upper-tier municipalities and lower-tier municipalities within a two-tier municipal system, and single-tier municipalities which are not part of a two-tier system.

In two-tier systems, the upper-tier municipality, either a county or a regional government, delivers certain services to local municipalities within its boundaries. The intent is to deliver services used by all or most local municipalities more efficiently and effectively.

Two-tier governments exist only in Southern Ontario—with the exception of the District of Muskoka. The District of Muskoka is traditionally grouped with regional governments in the South for purposes of analysis. All other municipalities in Northern Ontario are single-tier municipalities.

Counties

The county is the older and more common form of upper-tier municipality. Counties have traditionally been a federation of the townships, towns and villages within the same geographic area. Cities were not originally part of the county structure, although some have joined the county structure in recent years. The County of Oxford has a municipal structure similar to that of regional governments although it is a county. The County of Oxford is traditionally analyzed with regional municipalities for purposes of ministry financial analysis. Therefore, it is included in the group of regions and former regions in this Summary.

Regional Municipalities

Regional municipalities are restructured two-tier governments established in the postwar period. Metropolitan Toronto was created in the 1950s; 12 others were created in the 1960s and early 1970s. Regional government is a modified, stronger form of the county structure and regional municipalities have significantly greater responsibilities than counties.

Single-tiers in Southern Ontario

In 2002 there were 26 single-tiers in Southern Ontario. These municipalities are not represented on county council. However, in the past, some common services, such as homes for the aged, were usually provided by joint local boards. The powers of single-tier municipalities vary for historical reasons, depending on how and when they were created.

In 2001 a number of single-tier municipalities were created from former regional municipalities: Toronto, Ottawa, Greater Sudbury, Hamilton, Haldimand, Norfolk.

Northern Ontario

Northern Ontario is divided into 11 territorial districts which are administrative areas, not municipalities. The exception is the District of Muskoka which has a two-tier, regional type of government. All other municipalities in Northern Ontario are single-tiers. This includes the former Regional Municipality of Sudbury which amalgamated with area municipalities in 2001 to become the single-tier municipality of Greater Sudbury. Note that the District of Muskoka and Greater Sudbury have traditionally been analyzed with regional municipalities in Southern Ontario for purposes of ministry financial analysis. Therefore, these municipalities are grouped with Southern Ontario regions and former regions in this Summary.

Much of Northern Ontario is unorganized for municipal purposes. The Ministry of Northern Development and Mines assists inhabitants of unorganized territories set up local service boards to deliver basic services.

Consolidated Municipal Service Management

Consolidated municipal service management was introduced in 1997 to ensure that certain social and health services are planned and administered on a regional basis, whether a two-tier system is in place or not. Consolidated municipal service management is delivered by Consolidated Municipal Service Managers in the South (CMSMs) and by District Social Service Administration Boards in the North (DSSABs).

In the South, Consolidated Municipal Service Managers (CMSMs) are responsible for the delivery of social assistance, child care, and social housing, at a minimum. Consolidated Municipal Service Managers may also be given responsibility for land ambulance services, public health and the administration of portions of the *Provincial Offences Act*.

In Southern Ontario, 36 service areas were established and one municipality in each area was designated as the Consolidated Municipal Service Manager. All regional governments (some of which have since become single-tiers) and most county governments were designated. Separated municipalities have an agreement with the county in their area on the designation of the Consolidated Municipal Service Manager.

In some cases, municipalities other than the Consolidated Municipal Service Manager have been designated as service delivery agents for land ambulance and the administration of *Provincial Offences Act* services. To date, only regional governments and their successors have been given responsibility for public health.

In Northern Ontario, the City of Greater Sudbury was designated as a Consolidated Municipal Service Manager and 10 District Social Services Administration Boards (DSSABs) were created to serve the rest of the North. District Social Services Administration Boards are responsible for serving both municipalities and unorganized territory. At a minimum DSSABs manage the delivery of social assistance, child care and social housing and have the option to deliver land ambulance and public health.

Northern municipalities and the unorganized territories in their area also have the option to form an Area Service Board (ASB) to realize further cost savings and efficiencies by reducing the number of single-purpose bodies. ASBs would deliver services in six core areas: social assistance, child care, social housing, land ambulance, public health and homes for the aged. Northern communities organized as an ASB would have the option to deliver additional services including policing, waste management, economic development, airports, roads and bridges, emergency preparedness, land use planning, and the administration of portions of the Provincial Offences Act.

Municipal Roles and Responsibilities

The *Municipal Act, 2001* grants municipalities broad authority to deliver services and operate facilities in ten spheres of jurisdiction. The spheres of jurisdiction replaced many specific provisions of the "old" *Municipal Act* and are intended to avoid the need for enabling legislation when new issues arise. The spheres of jurisdiction are:

- Highways.
- Transportation systems other than highways, including transit, ferries and airports.
- Waste management.
- Public utilities, including water supply and sewage treatment.
- Culture, parks, recreation and heritage.
- Drainage and flood control, excluding storm sewers, floodways.
- Structures, including signs and fences.
- Parking.
- Animals.
- Economic development services.

Other Acts also authorize municipal powers, including the *Planning Act* and the *Building Code Act, Fire Protection and Prevention Act, Police Services Act,Ont ario Works Act* and *Social Housing Reform Act, 2000.*

Not all municipalities provide all services. In a two-tier system of municipal government, services may be assigned by legislation to upper-tiers or to lower-tiers. In some cases, responsibility may be shared by both levels of government. As an example, local municipalities are often responsible for collecting garbage, while the upper-tier is responsible for garbage disposal and broader waste management issues.

Certain responsibilities specified in the *Municipal Act, 2001* may be transferred from one level of government to another. The upper-tier council and a majority of lower-tier councils must vote in favour of the transfer. Also, the number of electors in the lower-tiers supporting the transfer must represent a majority of electors in the county or region.

Local Boards

There are many local boards involved in the provision of local services. These include health units, transit commissions, children's aid societies, and planning boards. Legislation administered by different ministries authorizes the establishment of local boards. For example, the *Health Protection and Promotion Act* administered by the Ministry of Health and Long Term Care provides for boards of health, and the *Public Libraries Act* administered by the Ministry of Citizenship governs public library boards.

The *Municipal Act, 2001* enables municipalities to establish a new type of board—the municipal service board. Municipal service boards may be created in five spheres of jurisdiction:

- Public utilities.
- Waste management.
- Transportation systems other than highways.
- Culture, parks, recreation and heritage.
- Parking, except on highways.

Members of municipal service boards are appointed by council, giving council significant control over the entity.

Some local boards, such as police service boards, are mandatory. Others, such as library boards, are optional and established at the discretion of council. Local boards also vary in the degree of independence from council. If council appoints some or all members of the board or has the right to approve funding, it may be able to exert considerable control. Mandatory boards are often beyond the effective control of council and make decisions and determine revenue requirements independently, or in compliance with existing standards or provincial legislation.

Consolidating Financial Activities of the Local Board

If a local board serves only one municipality, its financial transactions are fully consolidated in the Financial Information Return of the municipality. If one or more municipalities establish a joint local board, each municipality consolidates the board's financial transactions on a proportional basis in its Financial Information Return.

Part II: Summary of 2002 Results

How To Read a Table of Results

Municipalities are grouped into North and South, municipal type and population.

Measure

Number of municipalities reporting means the number reporting after conditions are applied to eliminate outliers and errors in calculation.

Range refers to minimum and maximum results.

Statistics for 2002 consist of: # Reporting, Range and Median.

Median refers to the middle value in a group. It is less affected by outlying values than the average.

Comparison with previous year.

Operating costs for police services per household

Population	2002 Reporting #	2002 Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	108	13 to 1,571	137	140
5,000 – 19,999	12	251 to 696	369	417
40,000 +	3	417 to 467	448	415
SOUTH				
Regions & Former Regions	11	152 to 640	448	407
Counties	2	289 to 302	289	294
Single-tiers				
Separated Towns/Twp	4	337 to 593	540	490
Separated Cities < 100,000	17	119 to 576	399	393
Separated Cities 100,000 +	4	312 to 621	344	345
Lower-tiers				
< 5,000	65	35 to 764	172	174
5,000 – 9,999	61	86 to 610	212	230
10,000 – 19,999	37	132 to 574	286	262
20,000 – 39,999	9	247 to 473	390	368
40,000 – 99,999	1	408	408	371
100,000 +				
ALL MUNICIPALITIES	334	13 to 1,517	231	238

FIR reference: SLC 91 1202 13.

The measure was reported by 334 municipalities in 2002 and 325 municipalities in 2001.

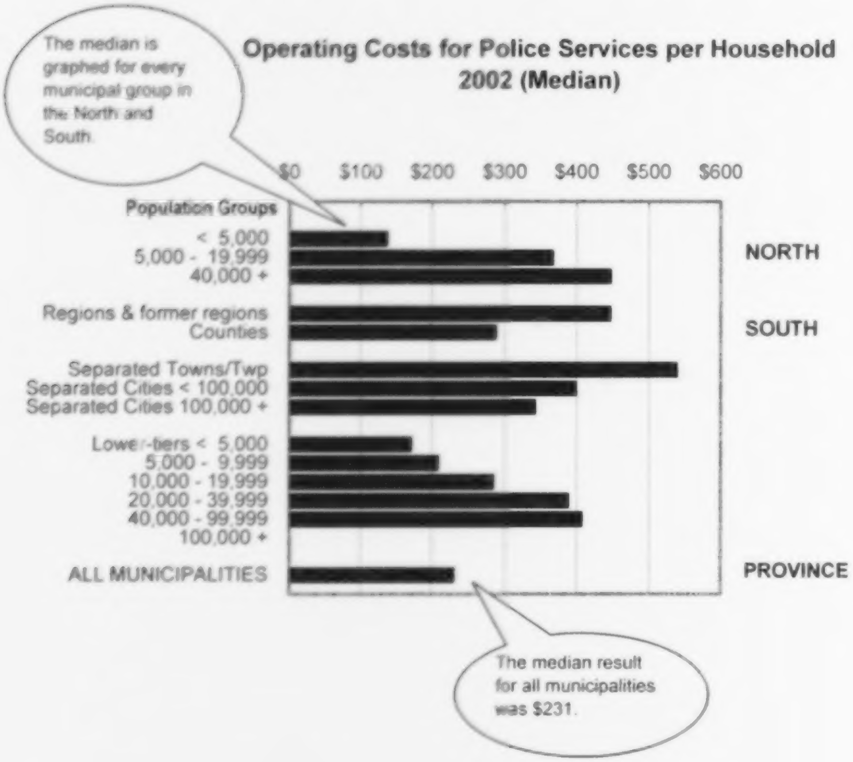
NOTES: If a county or region is responsible for police services, results for local area municipalities are not included.

Notes describe the conditions set to exclude errors in the data.

All Municipalities refers to the total number of municipalities reporting, subject to conditions.

FIR reference means the Schedule, Line, Column in the Financial Information Return (FIR) where the performance measure is reported.

How To Read a Bar Graph

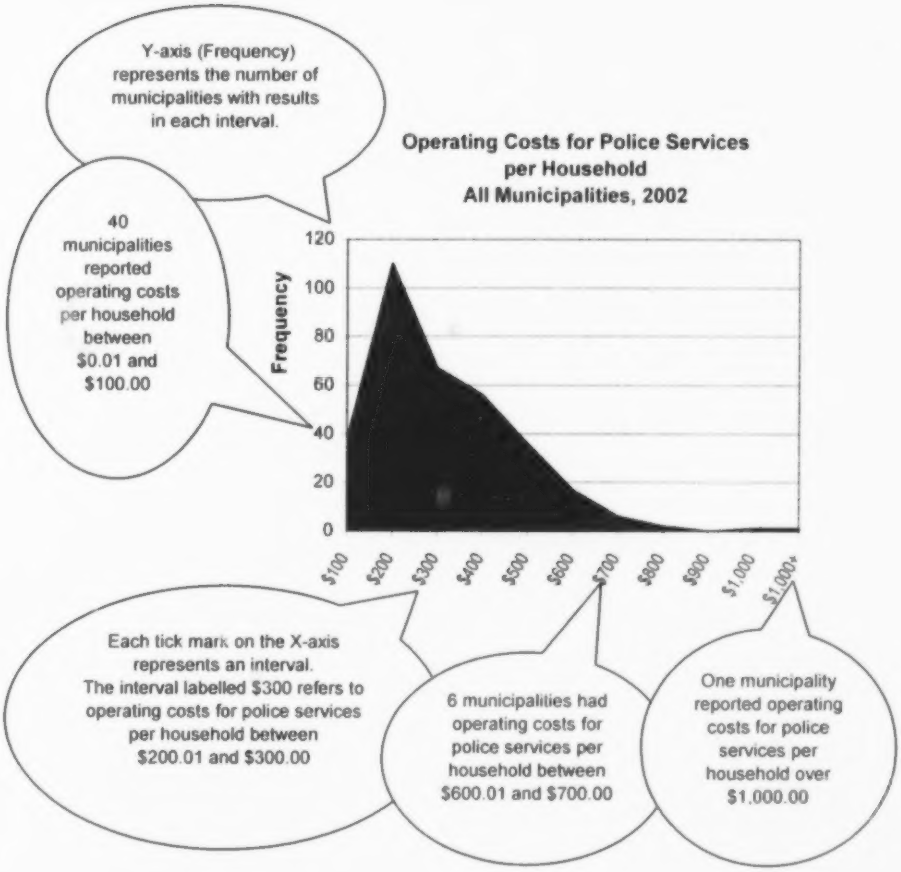


Operating Costs for Police Services per Household 2002 (Median)

The median is graphed for every municipal group in the North and South.

The median result for all municipalities was $231.

How To Read the Graph of a Frequency Distribution



Operating Costs for Police Services per Household All Municipalities, 2002

Y-axis (Frequency) represents the number of municipalities with results in each interval.

40 municipalities reported operating costs per household between $0.01 and $100.00

Each tick mark on the X-axis represents an interval. The interval labelled $300 refers to operating costs for police services per household between $200.01 and $300.00

6 municipalities had operating costs for police services per household between $600.01 and $700.00

One municipality reported operating costs for police services per household over $1,000.00

General Government:
Governance and corporate management as a percentage of total municipal operating costs

$$\frac{\text{Operating costs for governance and corporate management}}{\text{Total municipal operating costs}} \times 100$$

Operating costs for governance and corporate management as a percentage of total municipal operating costs

			2002	2001
Population	Reporting #	Range %	Median %	Median %
NORTH				
< 5,000	113	2% to 37%	14%	
5,000 – 19,999	11	1% to 15%	7%	14%
40,000 +	2	3% to 8%	3%	5%
SOUTH				
Regions & Former Regions	12	1% to 8%	3%	3%
Counties	22	0.4% to 10%	4%	1%
Single-tiers				
Separated Towns/Twp	4	1% to 12%	3%	
Separated Cities < 100,000	14	2% to 15%	5%	6%
Separated Cities 100,000 +	4	4% to 6%	5%	5%
Lower-tiers				
< 5,000	68	1% to 34%	13%	
5,000 – 9,999	70	1% to 24%	11%	
10,000 – 19,999	58	1% to 22%	10%	5%
20,000 – 39,999	15	2% to 16%	9%	8%
40,000 – 99,999	11	2% to 11%	6%	10%
100,000 +	11	4% to 13%	6%	4%
ALL MUNICIPALITIES	415	0.4% to 37%	9%	5%

FIR reference: SLC 91 0203 13. In 2002, 415 municipalities reported the measure, subject to conditions. In 2001, 29 municipalities reported it, reflecting the fact that municipalities had a choice of government categories and measures.

Conditions:

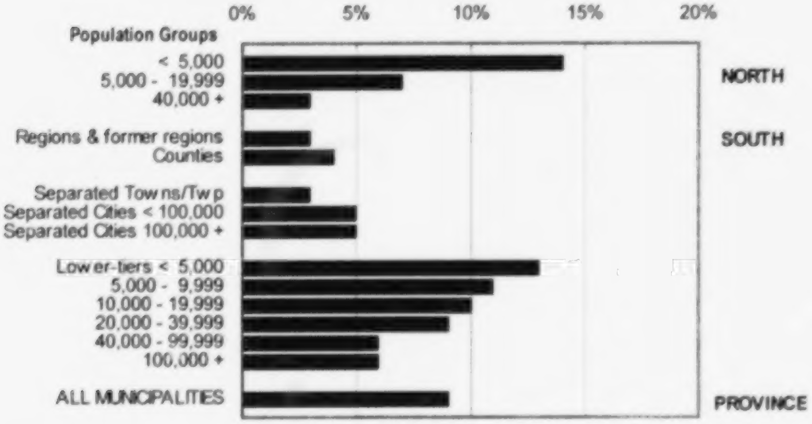
- Payments to the Municipal Property Assessment Corporation (SLC 42 5210 01) must be included in Schedule 40 (Revenue Fund Expenditures) as contracted services on the line for corporate management (SLC 40 0250 04). (SLC 40 0250 04 ≥ SLC 42 5210 or SLC 42 5210 is null.)

  If MPAC expenditures are reported on the line for program support, operating costs for the measure will be understated because MPAC payments are backed out.

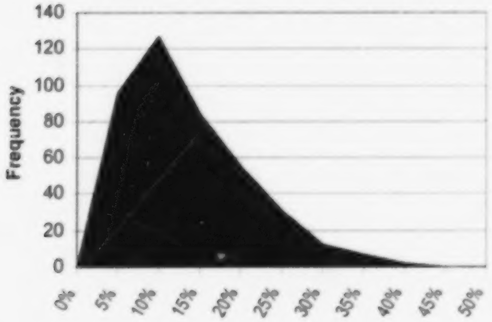
General Government: Efficiency

Governance and corporate management as a percentage of total municipal operating costs.

Operating Costs for Governance and Corporate Management as a Percentage of Total Municipal Operating Costs, 2002 (Median)



Operating Costs for Governance and Corporate Management as a Percentage of Total Municipal Operating Costs, All Municipalities (2002)



Objective Efficient municipal government.

Notes Since the general government measures are expressed as percentages, the proportion of total municipal operating costs spent on general government is measured rather than costs per unit.

In 2001 only 29 municipalities reported this measure. This was because municipalities had a choice of general government categories. Municipalities using the categories of members of council, general government support and corporate management reported the measure: general government support as a percentage of total municipal operating costs. Municipalities using the categories of governance, corporate management and program support reported the measure: governance and corporate management as a percentage of total municipal operating costs. As of 2002 all municipalities use the categories of governance, corporate management and program support.

A municipality is not included in the summary if it reported payments to the Municipal Property Assessment Corporation (MPAC), but did not include the amount in expenditures for contracted services on the line for corporate management in Schedule 40 (Revenue Fund Expenditures) of the FIR. Note that if MPAC expenditures were reported on the line for program support, operating costs would be understated because MPAC payments are netted out.

If a municipality includes tax write-offs in operating costs for general government, the measure will be higher than if tax write-offs were reported on the schedule for Continuity of Taxes Receivable, Schedule 72. This occurs because tax write-offs reported in the continuity schedule are not included in operating costs.

The general government measure nets out payments made by municipalities in the Greater Toronto Area for the equalization of social assistance and social housing.

Factors affecting results

Results are influenced by:

- Whether Municipal Property Assessment Corporation (MPAC) payments are reported on the correct line in Schedule 40 (Revenue Fund Expenditures) of the FIR. If MPAC payments are reported on the line for program support, operating costs may be very low or negative.
- Method for the allocation of program support (indirect costs).
- Full-time versus part-time councillors.
- Responsibility for Provincial Offences Act administration.
- Inclusion of tax write-offs in operating costs for general government support or corporate management.
- Whether expenditures for the administration of functional areas are reported as part of corporate management or reported as expenditures on the lines for the functional areas.
- Whether staff salaries are allocated to line functions if they perform both administrative and line functions.

Fire Services: Efficiency
Operating costs for fire services per $1,000 of property assessment

$$\frac{\text{Operating costs for fire services}}{\text{Total property assessment / 1,000}}$$

Operating costs for fire services per $1,000 of property assessment

			2002	2001	2000
Population	Reporting #	Range $	Median $	Median $	Median $
NORTH					
< 5,000	121	0.01 to 4.70	0.81	0.79	0.69
5,000 – 19,999	14	0.48 to 3.21	1.26	1.13	1.04
40,000 +	3	2.28 to 2.77	2.39	2.35	2.20
SOUTH					
Regions & Former Regions	4	1.37 to 1.55	1.44	1.27	1.43
Counties					
Single-tiers					
Separated Towns/Twp	4	0.46 to 1.71	0.59	0.63	0.50
Separated Cities < 100,000	17	0.45 to 2.85	1.63	1.81	1.83
Separated Cities 100,000 +	4	1.26 to 2.32	1.48	1.45	1.22
Lower-tiers					
< 5,000	67	0.13 to 2.75	0.50	0.50	0.42
5,000 – 9,999	70	0.10 to 2.22	0.46	0.45	0.46
10,000 – 19,999	59	0.28 to 2.02	0.50	0.46	0.47
20,000 – 39,999	15	0.33 to 2.07	0.63	0.60	0.58
40,000 – 99,999	11	0.59 to 2.37	1.28	1.22	1.30
100,000 +	11	0.75 to 1.99	1.07	0.96	1.01
ALL MUNICIPALITIES	400	0.01 to 4.70	0.62	0.61	0.55

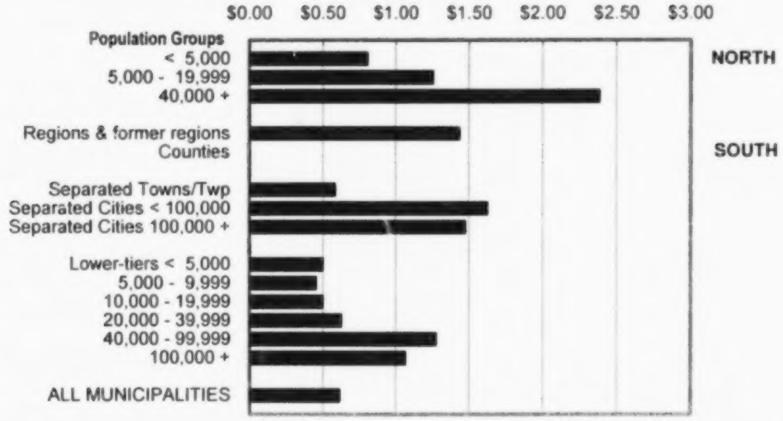
FIR reference: SLC 91 1101 13.

Condition: Municipality is not an upper-tier.

Subject to conditions, 400 municipalities reported in 2002, 380 municipalities in 2001 and 517 municipalities in 2000.

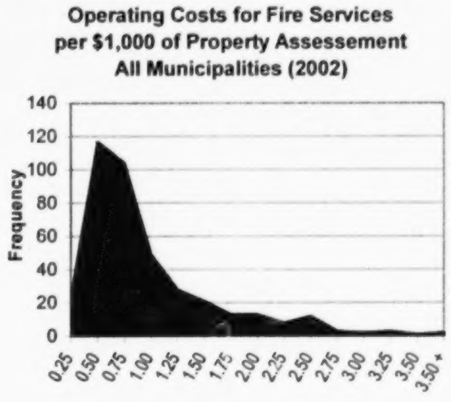
NOTES: Fire service is a lower-tier responsibility. Municipalities reporting in the regions and former regions group are single-tier municipalities which are former regions.

Operating Costs for Fire Services per $1,000 of Property Assessment
2002 (Median)



Fire Services: Efficiency

Operating costs for fire services per 1,000 of property assessment.



Objective

Efficient fire services.

Notes

Fire service is the responsibility of single-tier municipalities and local municipalities in a two-tier system.

The denominator is based on market value assessment and varies from municipality to municipality. Total assessment for a municipality will reflect regional values, the mix of residential, commercial and industrial properties and the urban/rural characteristics of the municipality. Low total assessment can make the performance measurement result disproportionately high while high assessment can make the result appear low.

A municipality will have a negative value for the efficiency measure if operating costs in the numerator are less than revenue received from other municipalities for the provision of fire services.

Factors affecting results

Results are influenced by:

- Total assessment.
- The composition of the fire fighting force: salaried, volunteer, combination.
- Salary schedules.
- Urban and rural mix.
- Density.
- Size of municipality and service area.
- Joint service provisions including Mutual Aid agreements with neighbouring municipalities.

- High cost for standby services.
- Number of call outs.
- Age of equipment and vehicles.
- Whether hydrants are reported as part of waterworks or fire services in the Financial Information Return.
- Service level decisions made by local councils on response time and other services can affect the number of firefighters on staff and the number of halls and equipment levels.
- Whether emergency coordination is part of the fire services budget.
- Fire departments offer a wide variety of services which include fire suppression, fire prevention, fire code enforcement, public education, first response medical service, hazardous material first response, auto extrication, rescue (high angle, water), mutual aid to other municipalities. Some municipalities offer specialized services such as highway rescue or water rescue.
- Whether hydrant maintenance is included in fire services or included in water services.
- Whether municipality provides airport-related empergency response service.
- Whether an emergency operation centre is reported as part of the fire budget.

Police Services: Efficiency
Operating costs for police services per household

$$\frac{\text{Operating costs for police services}}{\text{Total households}}$$

Operating costs for police services per household

Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	108	13 to 1,571	137	140
5,000 – 19,999	12	251 to 696	369	417
40,000 +	3	417 to 467	448	415
SOUTH				
Regions & Former Regions	11	152 to 640	448	407
Counties	2	289 to 302	289	294
Single-tiers				
Separated Towns/Twp	4	337 to 593	540	490
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Lower-tiers				
< 5,000	65	35 to 764	172	174
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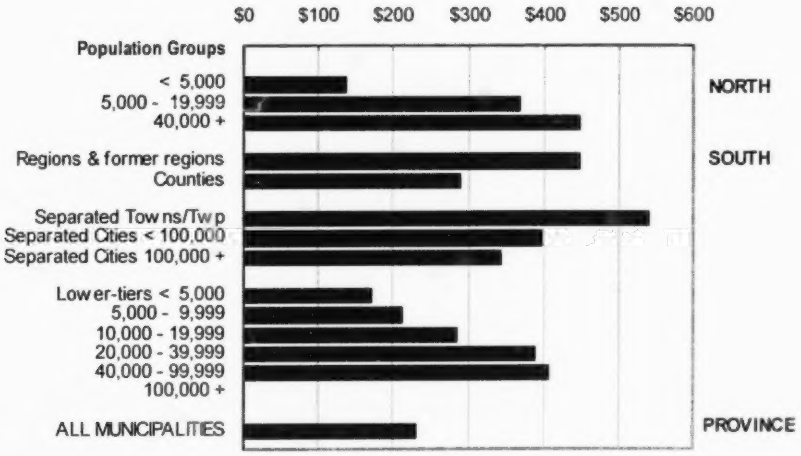
10,000 – 19,999	37	132 to 574	286	262
20,000 – 39,999	9	247 to 473	390	368
40,000 – 99,999	1	408	408	371
100,000 +				
ALL MUNICIPALITIES	334	13 to 1,517	231	238

FIR reference: SLC 91 1202 13.

The measure was reported by 334 municipalities in 2002 and 325 municipalities in 2001.

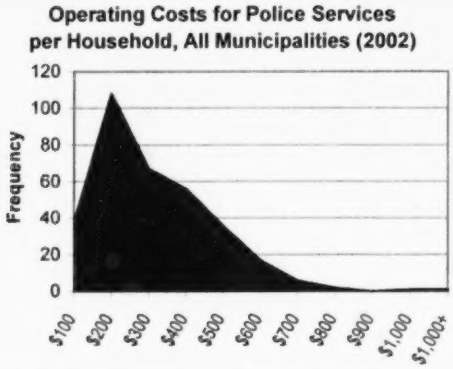
NOTES: If a county or region is responsible for police services, results for local area municipalities are not included.

Operating Costs for Police Services per Household
2002 (Median)



Police Services: Efficiency

Operating costs for police services per household.



Objective Efficient police services.

Notes Only one efficiency measure is calculated for the municipality, even if service is provided by two or more police forces. (Some amalgamated municipalities have separate contracts for areas which were separate municipalities before the amalgamation.)

If a county or region is responsible for police services, results for local area municipalities are not included in the summary. This is because residual costs reported by local area municipalities are automatically calculated as an efficiency measure regardless of whether a municipality is responsible for a service.

Factors affecting results Results are influenced by:

- Service area and population.
- Range of services, e.g. patrol, investigations, community relations, crime prevention, specialized activities such as tactical response and forensic investigation.
- Joint police service agreements.
- Facilities, maintenance and fleet costs.
- Labour costs.
- Urban and rural mix.
- Proximity and quantity of higher risk facilities: half-way houses, correctional facilities, mental health facilities.
- Lower-risk facilities (military bases, major hydro corridors, tourism attractions)
- Composition of police force (e.g., uniform and civilian).
- Unique geographical considerations (e.g., policing major bodies of water).

- One-time special events such as the arrival of a world leader.
- Infrequent events (natural or manmade disasters).
- Higher incidents of more complex crimes which require additional resources, such as homicides.
- Border crossings to U.S.
- Whether police services are provided on a contractual basis to an airport or casino. Note that only revenue received for services provided to other municipalities and revenue received for service provided outside municipal borders is subtracted from operating costs. Municipalities providing service to airports or casinos will have higher unit costs.

Police Services: Effectiveness
Violent crime rate per 1,000 persons

$$\frac{\text{Total number of actual incidents of violent crime, including incidents involving youths}}{\text{Population / 1,000}}$$

Violent crime rate per 1,000 persons

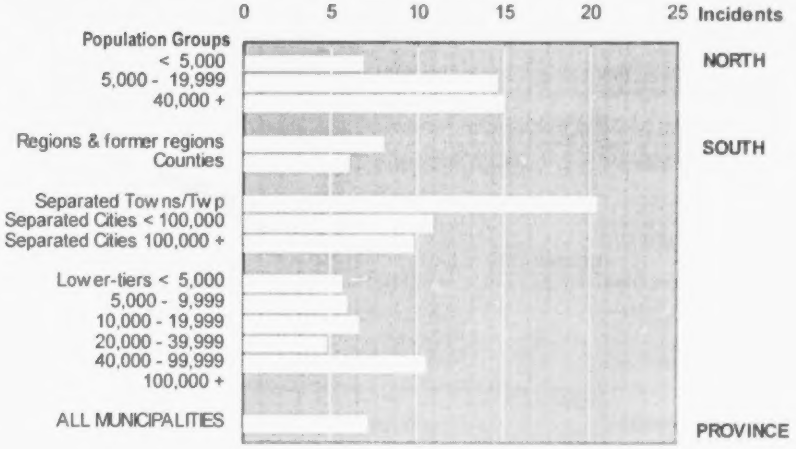
Population	Reporting #	Range #	2002 Median	2001 Median #
NORTH				
< 5,000	101	0 to 143	7	6
5,000 – 19,999	11	1 to 31	15	13
40,000 +	3	15 to 20	15	15
SOUTH				
Regions & Former Regions	11	5 to 14	8	9
Counties	2	6	6	5
Single-tiers				
Separated Towns/Twp	3	8 to 27	20	19
Separated Cities < 100,000	16	6 to 18	11	12
Separated Cities 100,000 +	3	8 to 12	10	10
Lower-tiers				
< 5,000	62	0 to 23	6	6
5,000 – 9,999	56	1 to 32	6	6
10,000 – 19,999	36	1 to 47	7	8
20,000 – 39,999	8	3 to 13	5	9
40,000 – 99,999	1	11	11	13
100,000 +				
ALL MUNICIPALITIES	313	0 to 143	7	7

FIR reference: SLC 92 1258 07. Subject ot conditions, the measure was reported by 313 municipalities in 2002, and 283 municipalities in 2001.

Condition: Number of actual incidents for total crimes in SLC 92 1263 05 is greater than 0.

NOTES: 2001 crime rate has been recast for municipalities with population over 100,000.

Violent Crime Rate per 1,000 Persons
2002 (Median)



Police Services:
Property crime rate per 1,000 persons

$$\frac{\text{Total number of actual incidents of property crime, including incidents involving youths}}{\text{Population / 1,000}}$$

Property crime rate per 1,000 persons

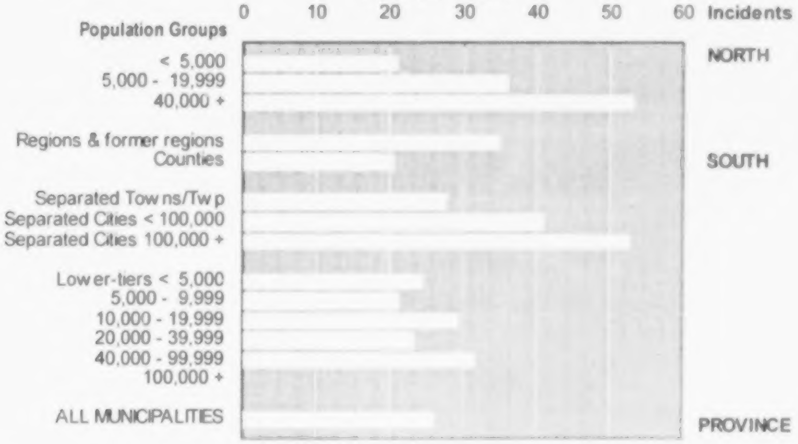
Population	Reporting #	Range #	2002 Median	2001 Median #
NORTH				
< 5,000	101	0 to 186	21	23
5,000 – 19,999	11	14 to 78	36	41
40,000 +	3	37 to 56	53	53
SOUTH				
Regions & Former Regions	11	23 to 47	35	39
Counties	2	21 to 23	21	21
Single-tiers				
Separated Towns/Twp	3	27 to 35	28	27
Separated Cities < 100,000	16	26 to 66	41	48
Separated Cities 100,000 +	3	49 to 65	53	50
Lower-tiers				
< 5,000	62	10 to 108	25	26
5,000 – 9,999	55	5 to 109	21	21
10,000 – 19,999	36	0 to 74	29	29
20,000 – 39,999	8	18 to 52	23	36
40,000 – 99,999	1	32	32	37
100,000 +				
ALL MUNICIPALITIES	313	0 to 186	26	28

FIR reference: SLC 92 1259 07. The measure was reported by 313 municipalities in 2002 and 286 municipalities in 2001.

Condition: Number of actual incidents for total crimes in SLC 92 1263 05 is greater than 0.

NOTES: 2001 crime rate is recast for municipalities with population over 100,000.

Property Crime Rate per 1,000 Persons
2002 (Median)



Police Services: Effectiveness
Total crime rate per 1,000 persons (Criminal Code offences, excluding traffic)

$$\frac{\text{Total number of actual incidents of violent crime, property crime, and other Criminal Code offences, excluding traffic}}{\text{Population / 1,000}}$$

Total crime rate per 1,000 persons (Criminal Code offences, excluding traffic)

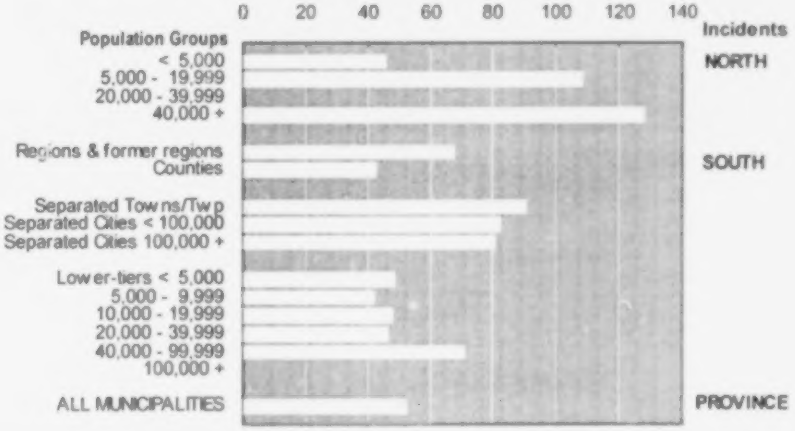
			2002
Population	Reporting #	Range #	Median #
NORTH			
< 5,000	101	2 to 7,388	46
5,000 – 19,999	11	20 to 173	109
40,000 +	3	88 to 154	128
SOUTH			
Regions & Former Regions	11	41 to 128	68
Counties	2	43 to 47	43
Single-tiers			
Separated Towns/Twp	4	65 to 165	90
Separated Cities < 100,000	16	56 to 142	83
Separated Cities 100,000 +	3	75 to 99	81
Lower-tiers			
< 5,000	62	18 to 371	49
5,000 – 9,999	56	13 to 241	42
10,000 – 19,999	36	19 to 391	49
20,000 – 39,999	8	28 to 104	47
40,000 – 99,999	1	71	71
100,000 +			
ALL MUNICIPALITIES	314	2 to 7,388	53

FIR reference: SLC 92 1263 07.

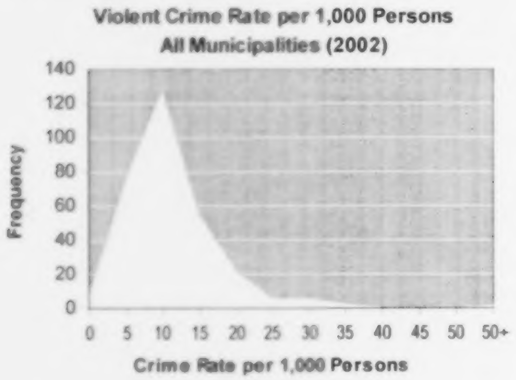
Condition: Number of actual incidents for total crimes is greater than 0 (SLC 92 1263 05 > 0).

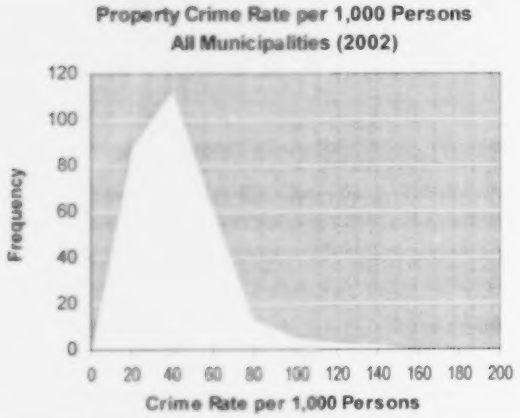
NOTES: Calculation clarified in 2002, therefore, there is no comparison with 2001 data.

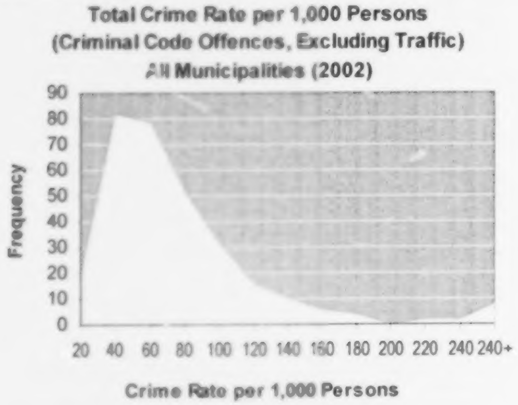
Total Crime Rate (Violent, Property and Other Crimes) per 1,000 Persons, 2002 (Median)



Police Services:
Property crime rate per 1,000 persons.
Violent crime rate per 1,000 persons.
Total crime rate per 1,000 persons (Criminal Code offences, excluding traffic).







Police Services: Effectiveness
Number of youths charged per 1,000 youths

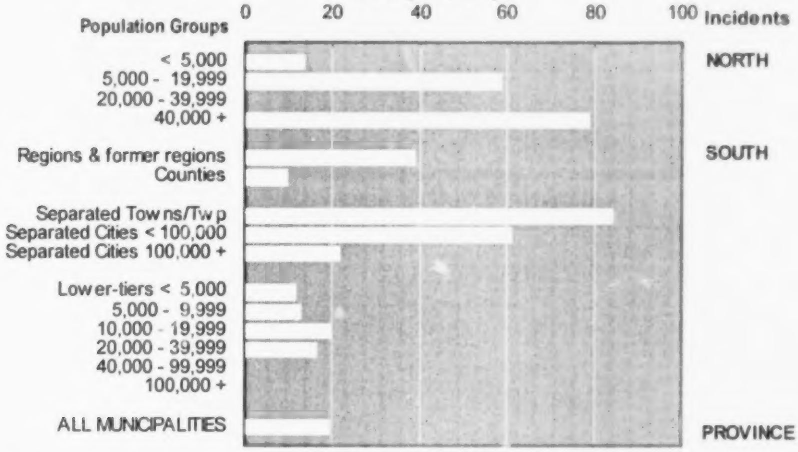
$$\frac{\text{Total number of youths charged}}{\text{Youth Population / 1,000}}$$

Number of youths charged per 1,000 youths

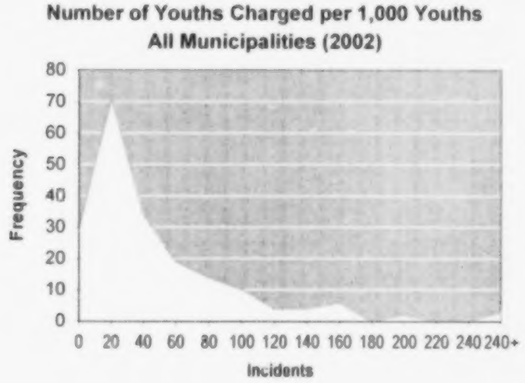
			2002
Population	Reporting \#	Range \#	Median \#
NORTH			
< 5,000	65	0 to 261	14
5,000 – 19,999	8	37 to 142	59
40,000 +	2	79 to 94	79
SOUTH			
Regions & Former Regions	8	0 to 71	39
Counties	1	10	10
Single-tiers			
Separated Towns/Twp	2	85 to 276	85
Separated Cities < 100,000	13	5 to 142	61
Separated Cities 100,000 +	2	22 to 68	22
Lower-tiers			
< 5,000	29	0 to 198	12
5,000 – 9,999	39	0 to 415	13
10,000 – 19,999	23	0 to 150	20
20,000 – 39,999	5	0 to 62	16
40,000 – 99,999			
100,000 +			
ALL MUNICIPALITIES	197	0 to 415	19

FIR reference: SLC 92 1264 07.
Condition: Number of actual incidents for total crimes in SLC 92 1263 05 is greater than 0.
NOTES: 2001 crime rate is recast for municipalities with population over 100,000.

Number of Youths Charged per 1,000 Youths, 2002 (Median)



Police Services: Effectiveness
Number of youths charged per 1,000 youths



Number of Youths Charged per 1,000 Youths
All Municipalities (2002)

Objectives	Safe Communities.
Notes	The measure does not include the number of youths who receive a resolution other than a charge, such as a "caution".

Factors affecting results

The number of youths charged is influenced by:

- Availability of data.
- Demographics.
- Population density.
- Urban and rural mix.
- Business and residential mix.
- Local economic cycles.
- Preventive and educational programs.
- Community involvement and partnerships.
- Political priorities and specific targeted policing initiatives.

Paved Roads: Efficiency

Operating costs for paved (hard top) roads per lane kilometre.

$$\frac{\text{Operating costs for paved (hard top) roads}}{\text{Total paved lane kilometres}}$$

Operating costs for paved (hard top) roads per lane kilometre

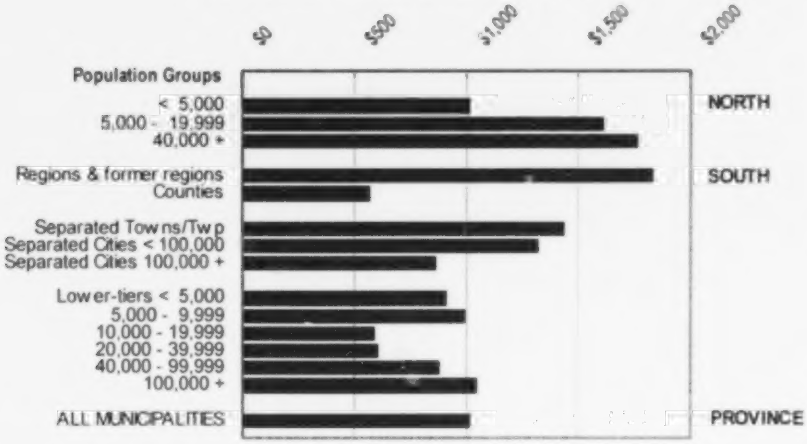
			2002
Population	Reporting ##	Range $	Median $
NORTH			
< 5,000	81	77 to 11,751	1,016
5,000 – 19,999	10	177 to 5,167	1,614
40,000 +	3	672 to 6,730	1,767
SOUTH			
Regions & Former Regions	10	644 to 5,962	1,830
Counties	17	142 to 2,007	570
Single-tiers			
Separated Towns/Twp	4	1,091 to 6,742	1,441
Separated Cities < 100,000	16	387 to 7,065	1,322
Separated Cities 100,000 +	4	500 to 1,493	866
Lower-tiers			
< 5,000	60	62 to 6,088	916
5,000 – 9,999	65	82 to 7,107	996
10,000 – 19,999	53	109 to 5,236	595
20,000 – 39,999	12	203 to 9,061	607
40,000 – 99,999	11	346 to 10,733	885
100,000 +	9	414 to 8,888	1,053
ALL MUNICIPALITIES	355	62 to 11,751	1,017

FIR reference: SLC 91 2105 13. A new formula was introduced in 2002, therefore there is no comparison with 2001.

Conditions:

- The sum of salaries, wages and employee benefits; materials; contracted services; rents and financial expenses is greater than 0. This eliminates municipalities that report only interfunctional adjustments, allocation of program support or revenue from other municipalities in operating costs.
- Municipalities were excluded if the number of lane kilometres exceeded the number of lane kilometres in the municipal road system in SLC 94 2202 02 when that line was completed.

Operating Costs for Paved (Hard Top) Roads per Lane Kilometre, 2002 (Median)



Unpaved Roads: Efficiency

Operating costs for unpaved (loose top) roads per lane kilometre.

$$\frac{\text{Operating costs for unpaved (loose top) roads}}{\text{Total unpaved lane kilometres}}$$

Operating costs for unpaved (loose top) roads per lane kilometre

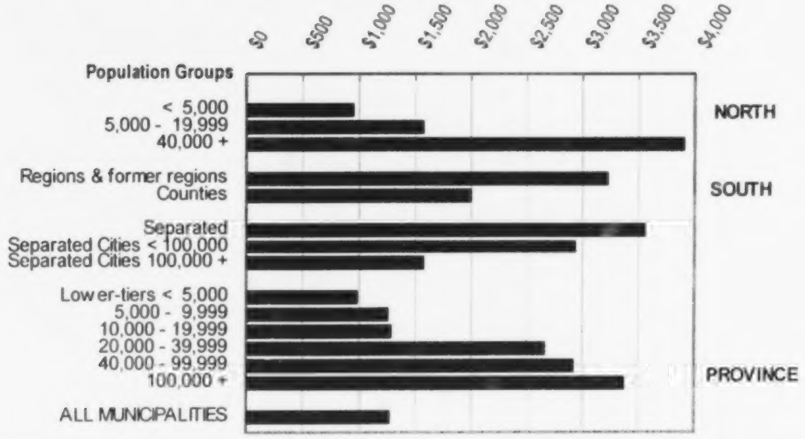
			2002
Population	Reporting #	Range $	Median $
NORTH			
< 5,000	87	46 to 14,057	951
5,000 – 19,999	9	557 to 4,605	1,582
40,000 +	3	2,228 to 14,253	3,914
SOUTH			
Regions & Former Regions	6	1,636 to 6,807	3,226
Counties	7	1,057 to 6,123	2,000
Single-tiers			
Separated Towns/Twp	1	3,557	3,557
Separated Cities < 100,000	8	1,096 to 5,089	2,946
Separated Cities 100,000 +	4	259 to 6,360	1,575
Lower-tiers			
< 5,000	54	66 to 7,197	984
5,000 – 9,999	62	422 to 10,518	1,251
10,000 – 19,999	44	345 to 13,354	1,285
20,000 – 39,999	13	790 to 9,346	2,674
40,000 – 99,999	10	1,130 to 9,634	2,928
100,000 +	5	708 to 5,740	3,380
ALL MUNICIPALITIES	313	46 to 14,253	1,271

FIR reference: SLC 91 2106 13. A new formula was introduced in 2002, therefore there is no comparison with 2001.

Conditions:

- The sum of salaries, wages and employee benefits; materials; contracted services; rents and financial expenses is greater than 0. This eliminates municipalities that report only interfunctional adjustments, allocation of program support or revenue from other municipalities in operating costs.
- Municipalities were excluded if the number of lane kilometres exceeded the number of lane kilometres in the municipal road system in SLC 94 2202 02 when that line was completed.

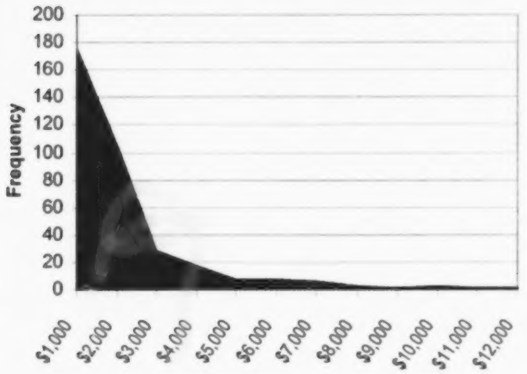
Operating Costs for Unpaved (Loose Top) Roads per Lane Kilometre, 2002 (Median)



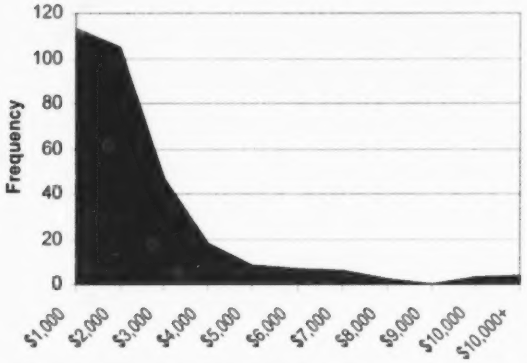
Paved and Unpaved Roads: Efficiency

Operating costs for paved (hard top) roads per lane kilometre.
Operating costs for unpaved (loose top) roads per lane kilometre.

Operating Costs for Paved (Hard Top) Roads per Lane Kilometre, All Municipalities (2002)



Operating Costs for Unpaved (Loose Top) Roads per Lane Kilometre, All Municipalities (2002)



Objective

Efficient maintenance of paved and unpaved roads.

Some regional municipalities reported road maintenance objectives as:

- Eliminate hazards to vehicular traffic.
- Protect the investment in road surface.
- Provide a smooth and safe riding surface.
- Safely accommodate emergency stopping of vehicles.
- Prevent accumulation of water on travelled portion of roadway, thereby preventing and reducing surface defects.

Notes

This measure does not include capital costs.

Factors affecting results

Results are influenced by:

- Financial reporting practices, including whether municipality keeps separate accounts for paved and unpaved roads.
- Whether indirect costs are included as part of roadways, e.g. supervision, technical support, building/stock maintenance, training, utilities, etc.
- Accuracy of estimate of number of lane kilometres.
- Special road projects can vary significantly from year to year.
- Climate, including frequency and severity of freezes and thaws, rainfall events.
- Age and condition of road network.
- Width of lanes affects surface area maintained.
- Age of equipment.
- Percentage of road types, such as arterial, local roads and residential streets.
- Width of lanes.
- Traffic volume and type of traffic.
- Proportion of heavy trunks in the traffic stream.
- Urban and rural mix.
- Density.
- Size of municipality.
- Service level decisions made by local council, including pavement standards.
- Maintenance standards.
- Presence of proactive preventative maintenance program.
- Inclusion of sidewalks, walkways, alleys.
- Costs incurred as a result of a natural disaster.
- Whether leaf pickup is included reported as a roadways expenditure or solid waste expenditure.

Adequacy of Roads: Effectiveness

Percentage of paved lane kilometres where the condition is rated as good to very good.

$$\frac{\text{Number of paved lane kilometres rates as good to very good}}{\text{Total number of paved lane kilometres tested}} \times 100$$

Percentage of paved lane kilometres where the condition is rated as good to very good

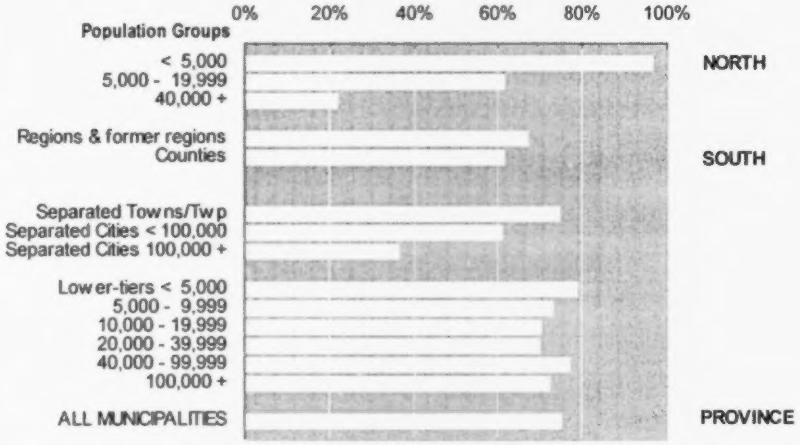
Population	Reporting #	Range %	2002 Median %	2001 Median %
NORTH				
< 5,000	70	5% to 100%	97%	100%
5,000 – 19,999	8	29% to 100%	61%	37%
40,000 +	2	22% to 30%	22%	30%
SOUTH				
Regions & Former Regions	11	23% to 84%	67%	65%
Counties	18	35% to 100%	61%	67%
Single-tiers				
Separated Towns/Twp	3	67% to 85%	75%	76%
Separated Cities < 100,000	15	18% to 100%	61%	61%
Separated Cities 100,000 +	4	35% to 77%	37%	40%
Lower-tiers				
< 5,000	49	22% to 100%	79%	75%
5,000 – 9,999	58	10% to 100%	73%	79%
10,000 – 19,999	47	9% to 186%	70%	71%
20,000 – 39,999	9	40% to 93%	70%	70%
40,000 – 99,999	10	24% to 100%	77%	75%
100,000 +	11	52% to 100%	72%	71%
ALL MUNICIPALITIES	315	5% to 100%	75%	75%

FIR reference: SLC 92 2152 07. In 2002, 315 municipalities reported, subject to conditions, and in 2001 and 272 municipalities reported.

Conditions:

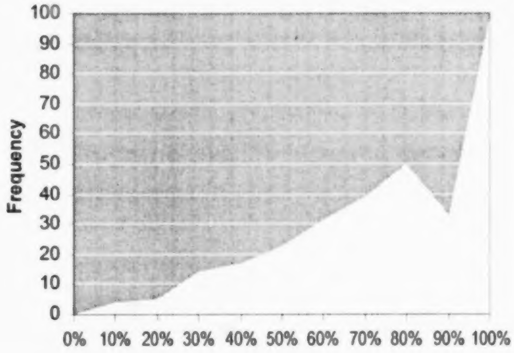
- Municipalities were excluded if the number of lane kilometres exceeded the number of lane kilometres in the municipal road system in SLC 94 2202 02 when SLC 94 2202 02 was completed.
- Measure is less than or equal to 100%.

Percentage of Paved Lane Kilometres Where the Condition is Rated as Good to Very Good, 2002 (Median)



Adequacy of Roads: Effectiveness

Percentage of paved lane kilometres where the condition is rated as good to very good.



Percentage of Paved Lane Kilometres Where the Condition is Rated as Good to Very Good All Municipalities (2002)

Objective

Provide a paved road system that has a pavement condition that meets municipal objectives.

Notes

The ministry recommends that municipalities test the pavement condition using one of two established methods:

- Pavement Condition Index (PCI).
- Ministry of Transportation's Roads Inventory Management System (RIMS).

Factors affecting results

Results are influenced by:

- Whether a sample or all lane kilometres are tested.
- Method of testing lane kilometres, i.e. an estimate or use of a formal rating system based on PCI or RIMS.
- Local service standards.
- Frequency of rating road inventory.
- Whether the same PCI value is considered adequate for all types of roads: arterial, collector, local.

Roadways — Winter Control: Efficiency

Operating costs for winter control maintenance of roadways per lane kilometre.

$$\frac{\text{Operating costs for winter control maintenance of roadways}}{\text{Total lane kilometres maintained in winter}}$$

Operating costs for winter control maintenance of roadways per lane kilometre

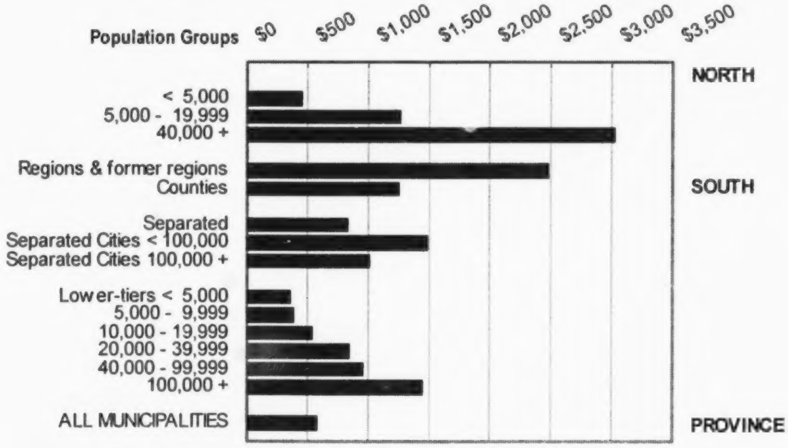
Population	Reporting #	2002 Range $	2002 Median $
NORTH			
< 5,000	96	15 to 6,240	460
5,000 – 19,999	11	172 to 5,802	1,265
40,000 +	3	790 to 5,432	3,028
SOUTH			
Regions & Former Regions	9	989 to 3,936	2,484
Counties	16	826 to 2,609	1,257
Single-tiers			
Separated Towns/Twp	4	753 to 1,569	833
Separated Cities < 100,000	16	633 to 3,328	1,494
Separated Cities 100,000 +	4	442 to 2,195	1,013
Lower-tiers			
< 5,000	59	105 to 3,892	368
5,000 – 9,999	62	33 to 2,221	395
10,000 – 19,999	50	130 to 3,295	549
20,000 – 39,999	8	302 to 1,230	844
40,000 – 99,999	9	635 to 2,751	957
100,000 +	9	851 to 2,174	1,449
ALL MUNICIPALITIES	356	15 to 6,240	582

FIR reference: SLC 91 2203 13. A new formula was introduced in 2002, therefore there is no comparison with 2001.

Conditions:

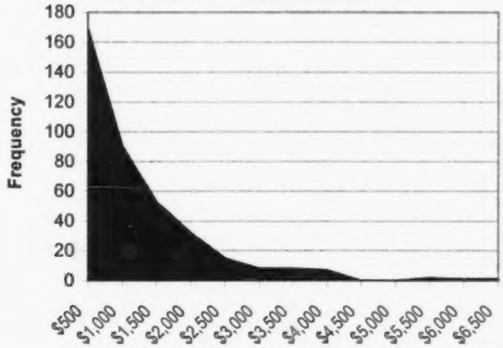
- Municipalities were excluded if the number of lane kilometres maintained in winter in the denominator exceeded the number of lane kilometres in the municipal road system in SLC 94 2202 02 when SLC 94 2202 02 was completed.

Operating Costs for Winter Maintenance of Roadways per Lane Kilometre Maintained in Winter, 2002 (Median)



Roadways — Winter Control: Efficiency

Operating costs for winter control maintenance of roadways per lane kilometre maintained in winter.



Operating Costs for Winter Maintenance of Roadways per Lane Kilometre Maintained in Winter All Municipalities (2002)

Objective Efficient winter control maintenance of roadways.

Notes Municipalities should take care that the number of lane kilometres maintained in winter reported in the denominator does not exceed the number of lane kilometres maintained in winter in the municipality (as reported in Schedule 94).

Some municipalities have historically reported winter control as part of roadways when reporting to the province. This may make it more difficult to identify winter maintenance costs used in performance measures. In some cases winter maintenance costs may be understated, particularly where a municipality reports costs for materials only.

The 2002 winter control efficiency measure includes clearing sidewalks, parking lots and driveways for seniors and disabled persons, where these services are offered. Since not all municipalities provide these services, operating costs may be higher for municipalities which provide these services.

Factors affecting results Results are influenced by:

- Financial reporting practices, including whether functional administration costs are included and whether winter control costs are recorded separately from roadways.
- Average snowfall and frequency and severity of winter storm events.

- Number and extent of areas prone to drifting.
- Road types, such as arterial and non-arterial roads.
- Urban and rural mix.
- Number of structures.
- Density.
- Traffic volume.
- Size of municipality and service area.
- Service level decisions made by local council, e.g. order of roads cleared, threshold for responding to a winter storm event, condition of clearing.
- Number of no-wing zones.
- Materials used.
- Winter event prepardedness.
- Age of infrastructure.
- Age of equipment and vehicles.
- Cost of standby services.
- Competitive market conditions.

Roadways — Winter Control:

Percentage of winter events where the response met or exceeded locally determined road maintenance standards.

$$\frac{\text{Number of winter event responses that met or exceeded municipal road maintenance standards}}{\text{Total number of winter event responses}}$$

Percentage of winter events where the response met or exceeded locally determined road maintenance standards.

Population	Reporting #	Range %	2002 Median %	2001 Median %	2000 Median %
NORTH					
< 5,000	82	20 to 100	100	100	100
5,000 – 19,999	12	91 to 100	100	100	96
40,000 +	3	100	100	100	100
SOUTH					
Regions & Former Regions	12	100	100	100	100
Counties	15	85 to 100	100	100	100
Single-tiers					
Separated Towns/Twp	2	100	100	100	100
Separated Cities < 100,000	15	90 to 100	100	100	100
Separated Cities 100,000 +	4	95 to 100	96	94	97
Lower-tiers					
< 5,000	51	56 to 100	100	100	100
5,000 – 9,999	62	22 to 100	100	100	100
10,000 – 19,999	55	10 to 100	100	100	100
20,000 – 39,999	13	93 to 100	100	100	100
40,000 – 99,999	11	80 to 100	100	100	100
100,000 +	11	93 to 100	100	100	100
ALL MUNICIPALITIES	348	10 to 100	100	100	100

FIR reference: SLC 92 2251 07. The measure was reported by 348 municipalities in 2002, 320 municipalities in 2001 and 322 municipalities in 2000.

Conditions:

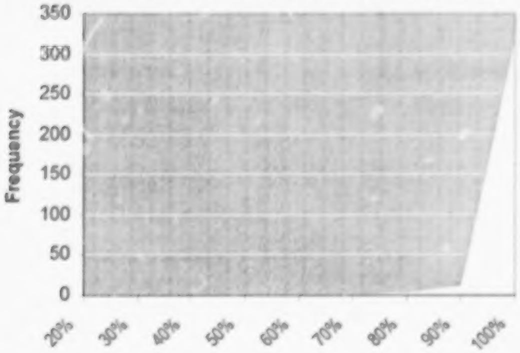
- Result does not exceed 100%.
- Number of winter events is greater than zero and less than or equal to 100%.

The median for 2002 is not graphed because all but one municipal group had median results of 100%.

Roadways — Winter Control: Effectiveness

Percentage of winter events where the response met or exceeded locally determined road maintenance standards.

Percentage of Winter Events Where the Response Met or Exceeded Locally Determined Road Maintenance Standards, All Municipalities (2002)



Objective

Provide an appropriate winter storm event response.

Factors affecting results

Effectiveness results are influenced by the same factors which affect the efficiency measure, including financial reporting practices, climate, road types and traffic volume, development patterns, equipment condition and local service level decisions.

The excellent results for this measure indicate that most municipalities have been successful in meeting the service level standards set by their own councils—which must, at a minimum, conform to minimum service level standards set by the province. Since service levels may differ widely from municipality to municipality, municipal standards should be considered before making comparisons.

The median response for the province and all population categories is 100%. For each municipal group, the range should be examined. In 2002, there were 64 municipalities with results below 100%.

Some municipalities which did not report the measure indicated in the notes that that they had no defined winter control standards.

Conventional Transit:
Operating costs for conventional transit per regular service passenger trip.

$$\frac{\text{Operating costs for conventional transit}}{\text{Total number of conventional transit passenger trips in service area}}$$

Operating costs for conventional transit per regular service passenger trip

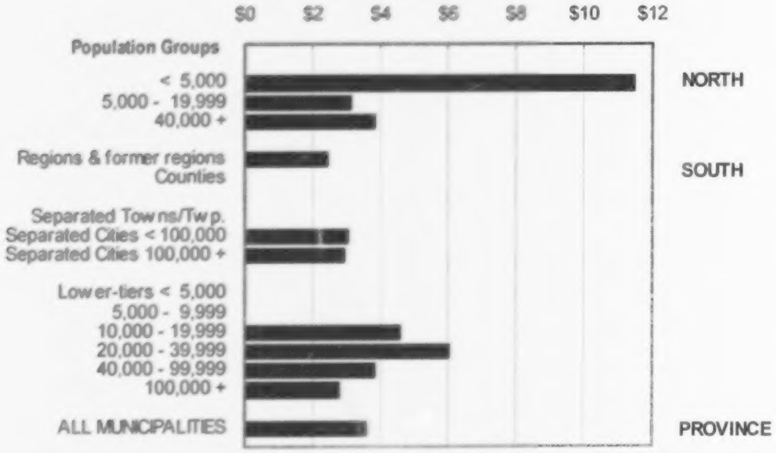
			2002	2001	2000
Population	Reporting \#	Range $	Median $	Median $	Median $
NORTH					
< 5,000	3	6.95 to 32.25	11.49	33.65	2.97
5,000 – 19,999	2	3.16 to 3.65	3.16	2.56	2.46
40,000 +	3	2.12 to 3.90	3.83	3.22	3.46
SOUTH					
Regions & Former Regions	5	2.01 to 4.26	2.45	2.16	2.48
Counties					
Single-tiers					
Separated Towns/Twp					
Separated Cities < 100,000	10	1.89 to 8.92	3.06	3.37	2.79
Separated Cities 100,000 +	4	2.19 to 3.87	2.93	2.89	2.27
Lower-tiers					
< 5,000					
5,000 – 9,999				10.08	
10,000 – 19,999	7	1.51 to 20.73	4.59	5.30	4.94
20,000 – 39,999	5	5.29 to 11.14	6.04	5.76	5.61
40,000 – 99,999	7	3.20 to 7.80	3.85	3.39	3.83
100,000 +	6	2.29 to 3.92	2.80	2.32	1.98
ALL MUNICIPALITIES	52	1.51 to 32.25	3.59	3.34	2.97

FIR reference: SLC 91 2301 13 . The measure was reported by 52 municipalities in 2002, 55 municipalities in 2001 and 49 municipalities in 2000.

Condition:

- Regular service passenger trips were greater than or equal to 1,000.

Operating Costs for Conventional Transit per Regular Service Passenger Trip, 2002 (Median)



Conventional Transit Ridership: Effectiveness

Number of conventional transit passenger trips per person in the service area in a year.

$$\frac{\text{Total number of regular service passenger trips on conventional transit in the service area}}{\text{Population of service area}}$$

Number of conventional transit passenger trips per person in the service area in a year.

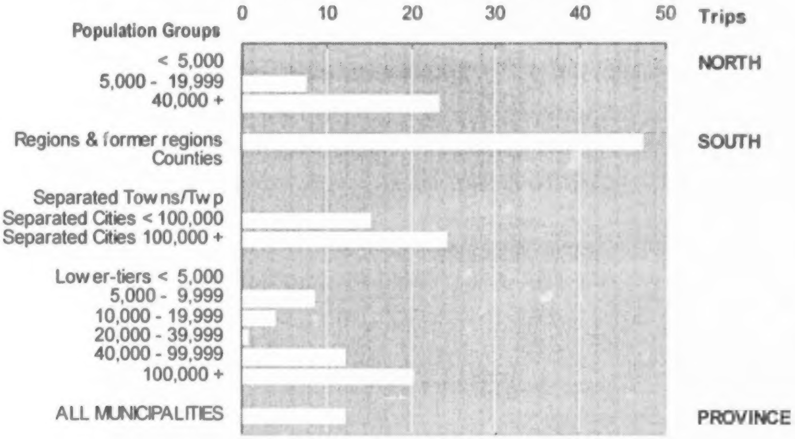
			2002	2001	2000
Population	Reporting #	Range #	Median #	Median #	Median #
NORTH					
< 5,000	3	0.3	0.3	0.3	0.3
5,000 – 19,999	2	8 to 14	8	8	17
40,000 +	3	20 to 42	23	26	32
SOUTH					
Regions & Former Regions	5	11 to 160	47	28	48
Counties					
Single-tiers					
Separated Towns/Twp					
Separated Cities < 100,000	11	3 to 52	15	15	16
Separated Cities 100,000 +	4	6 to 47	24	23	23
Lower-tiers					
< 5,000					
5,000 – 9,999	1	9	9	9	
10,000 – 19,999	7	0.5 to 20	4	2	2
20,000 – 39,999	5	0.8 to 6	0.9	1	1
40,000 – 99,999	7	2 to 15	12	12	15
100,000 +	6	10 to 40	20	21	19
ALL MUNICIPALITIES	54	0.3 to 160	12	11	15

FIR reference: SLC 92 2351 07. The measure was reported by 54 municipalities in 2002, 55 municipalities in 2001 and 54 municipalities in 2000.

Condition:

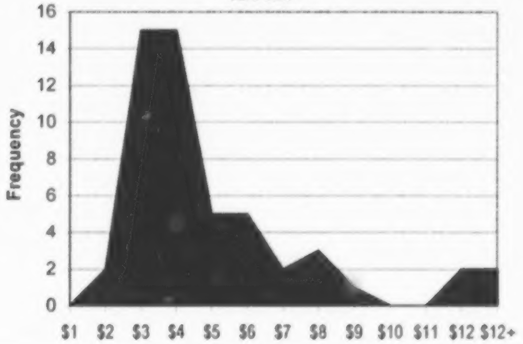
- Regular service passenger trips in SLC 92 2351 06 are greater than or equal to 1,000.

Number of Conventional Transit Passenger Trips per Person in the Service Area in a Year, 2002 (Median)

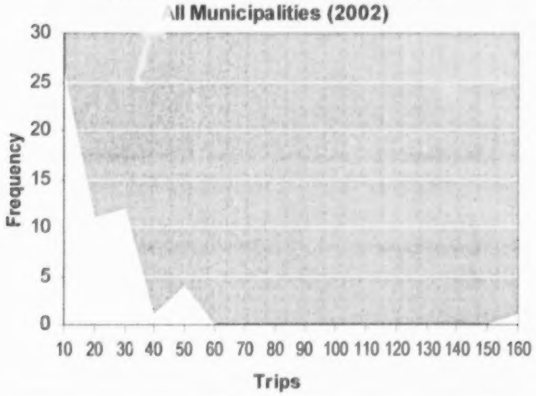


Conventional Transit: Efficiency
Operating costs for conventional transit per regular service passenger trip.

Operating Costs for Conventional Transit per Regular Service Passenger Trip, All Municipalities (2002)



Number of Conventional Transit Passenger Trips per Person in the Service Area in a Year All Municipalities (2002)



Objectives

Efficiency: Efficient conventional transit services.
Effectiveness: Maximum utilization of transit services.

Notes

The number of municipalities reporting a measure should be considered. When a small number of municipalities in a population group reports a measure, results will be affected.

Toronto is grouped with regions and former regions.

Factors affecting results

Results are influenced by:

- Transit ridership.
- Whether ridership is estimated or counted.
- Level of transit investment.
- Service levels: routes, hours of operation, frequency of service.
- Urban form.
- Density.
- Development patterns.
- Population density.
- Age of fleet.
- Distribution of demand (peaks).
- Fuel costs.
- Salary levels.
- Vehicle type: e.g. low floor buses, light rail trains (LRT), subway.

Service levels affect results. For example, costs and ridership will be affected if service is offered to a limited area or there are few routes. Hours of operation and decisions about Sunday and holiday service affect results.

Urban form affects routes and ridership. Separate downtown cores tend to disperse trips and service which may reduce ridership.

Aging fleets may incur higher operating costs.

Wastewater Collection: Efficiency

Operating costs for the collection of wastewater per kilometre of wastewater main.

$$\frac{\text{Operating costs for the collection of wastewater}}{\text{Total kilometres of wastewater main}}$$

Operating costs for the collection of wastewater per kilometre of wastewater main.

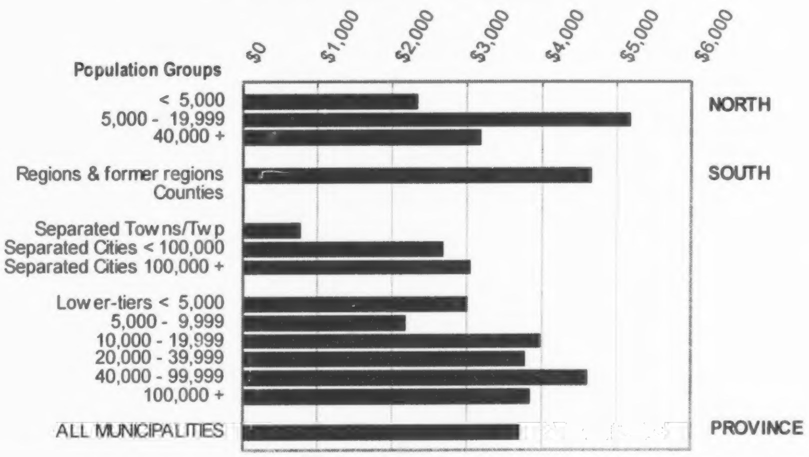
Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	17	395 to 12,400	2,345	2,862
5,000 – 19,999	9	482 to 10,519	5,186	429
40,000 +	2	3,171 to 5,912	3,171	
SOUTH				
Regions & Former Regions	7	3,504 to 7,668	4,655	
Counties				
Single-tiers				
Separated Towns/Twp	4	560 to 1,421	764	
Separated Cities < 100,000	15	1,011 to 9,570	2,679	2,793
Separated Cities 100,000 +	4	1,826 to 8,261	3,036	
Lower-tiers				
< 5,000	12	183 to 12,662	3,005	178
5,000 – 9,999	24	157 to 8,253	2,185	2,421
10,000 – 19,999	36	333 to 14,085	3,982	3,545
20,000 – 39,999	12	133 to 9,289	3,762	1,846
40,000 – 99,999	5	2,452 to 7,588	4,604	3,614
100,000 +	6	1,637 to 4,498	3,836	2,372
ALL MUNICIPALITIES	153	133 to 14,085	3,696	2,641

FIR reference: SLC 91 3103 13. In 2002, 153 municipalities reported the measure, subject to conditions. In 2001, 49 municipalities completed the measure. Note that in 2001, municipalities completing the integrated measure could not complete the individual measures for wastewater collection or wastewater treatment and disposal.

Conditions:

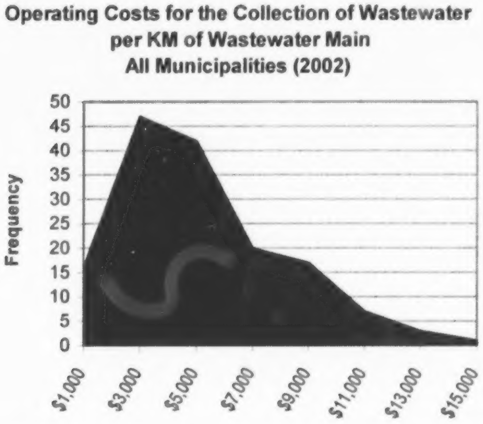
- The measure was less than $15,000.
- Operating costs for wastewater collection were greater than $2. Also, operating costs for wastewater treatment and disposal were greater than $2, if that measure was completed. Token values for operating costs could result if the municipality was attempting to report only the integrated measure for wastewater, but inadvertently completed an individual measure.

Operating Costs for Collection of Wastewater per KM of Wastewater Main, Median (2002)



Wastewater Collection: Efficiency

Operating costs for the collection of wastewater per kilometre of wastewater main.



Operating Costs for the Collection of Wastewater per KM of Wastewater Main All Municipalities (2002)

Objective

Efficient municipal wastewater services.

Notes

For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reported only the integrated measure for wastewater collection, treatment and disposal in 2001. In 2002, municipalities could report the integrated measure and the individual measures.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Whether costs for wastewater collection and treatment/disposal are recorded separately or are estimated.
- Age, condition and size of the wastewater collection system.
- Type of wastewater mains, e.g. gravity fed, low pressure.
- Number and size of pumping stations.
- Variations in flow.
- General maintenance, inspection and flow monitoring.
- Frequency of cleaning, flushing and blockage removal.
- Extent of water infiltration into sewers.

- Population and density of service area.
- Urban/rural mix, e.g. whether service is provided to rural areas.
- Precipitation and severity of storm events.
- Division of responsibility for wastewater collection between local area municipalities and regional municipality. For example, the local municipality may be responsible for sewage collection from the street line to the trunk line. The regional municipality may be responsible for sewage conveyance from the municipality to water pollution control plants.

Wastewater Treatment and Disposal: Efficiency
Operating costs for the treatment and disposal of wastewater per megalitre.

$$\frac{\text{Operating costs for the treatment and disposal of wastewater}}{\text{Total megalitres of wastewater treated}}$$

Operating costs for the treatment and disposal of wastewater per megalitre

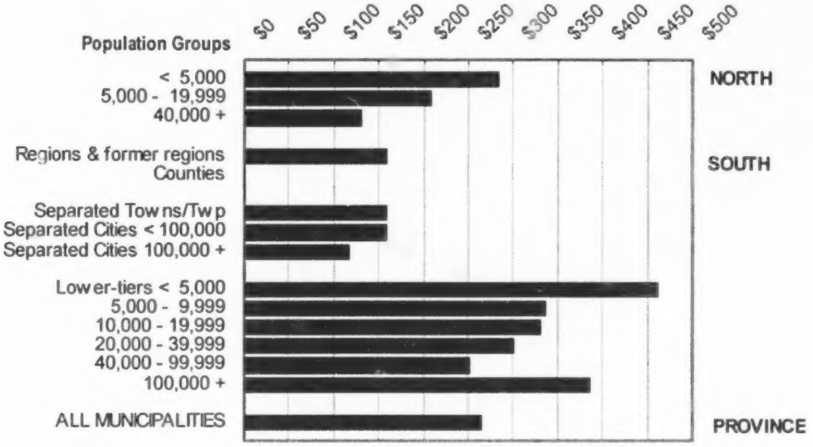
			2002	2001
Population	Reporting #	Range $	Median $	Median $
NORTH				
< 5,000	22	72 to 2,808	285	193
5,000 – 19,999	9	66 to 345	209	208
40,000 +	2	130 to 155	130	
SOUTH				
Regions & Former Regions	9	112 to 737	159	144
Counties				
Single-tiers				
Separated Towns/Twp	4	73 to 451	160	
Separated Cities < 100,000	14	109 to 352	159	217
Separated Cities 100,000 +	4	108 to 291	118	
Lower-tiers				
< 5,000	19	52 to 11,375	462	407
5,000 – 9,999	28	46 to 1,653	338	178
10,000 – 19,999	29	11 to 6,578	331	482
20,000 – 39,999	9	157 to 1,634	301	238
40,000 – 99,999	2	251 to 340	251	
100,000 +	3	387 to 410	387	377
ALL MUNICIPALITIES	154	11 to 11,375	266	238

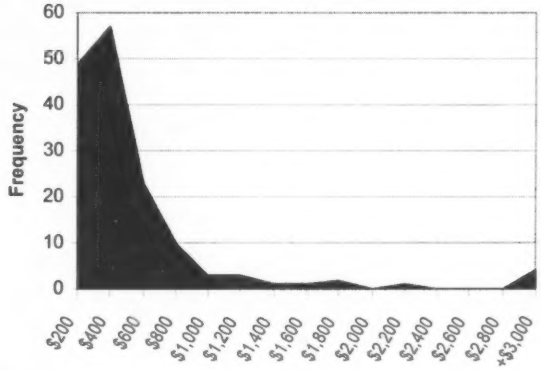
FIR reference: SLC 91 3104 13. In 2002, 154 municipalities reported the measure, subject to conditions and in 2001 33 reported. Note that in 2001, municipalities completing the integrated measure could not complete the individual measures for wastewater collection or wastewater treatment and disposal.

Municipalities were excluded if:

- The number of megalitres exceeded 1.25 times the population in SLC 90 0020 01.
- Megalitres were less than or equal to 5.0.
- Operating costs for wastewater treatment and disposal were greater than $2. Also, operating costs for wastewater collection were greater than $2, if that measure was completed. Token values for operating costs could result if the municipality was attempting to report only the integrated measure for wastewater, but inadvertently completed an individual measure.
- One municipality was not included it indicated it reported cubic metres instead of megalitres in the denominator.

Wastewater Treatment and Disposal:
Operating costs for the treatment and disposal of wastewater per megalitre.


Operating Costs for Treatment and Disposal of Wastewater per Megalitre, Median (2002)


Operating Costs for the Treatment and Disposal of Wastewater per Megalitre, All Municipalities (2002)

Objective

Efficient municipal wastewater services.

Notes

For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reported only the integrated measure for wastewater collection, treatment and disposal in 2001. In 2002, municipalities could report the integrated measure and the individual measures.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Whether costs for wastewater collection and treatment/disposal are recorded separately or are estimated.
- Population and density of service area.
- Urban/rural mix, e.g. whether collection and treatment service is provided to rural areas.
- Precipitation and severity of storm events.
- Extent of water infiltration into the sewers.
- Number, size and scale of municipal treatment plants.
- Whether plants receive both sewage and storm water.
- Type of treatment (primary, secondary, tertiary or lagoon).
- Treatment levels.
- Destination of the plant's effluent (lake versus stream).
- Method of sludge disposal (landfill, incineration or land application).
- Increases in the cost of disposing of biosolids.
- Volume and strength of industrial sewage.
- Wastewater testing.
- Certificate of Approval requirements (C of A).
- Errors in the calculation of megalitres. Whether municipality reports in cubic metres.

Wastewater Collection, Treatment and Disposal (Integrated System): Efficiency

Operating costs for the collection, treatment and disposal of wastewater per megalitre.

$$\frac{\text{Operating costs for the collection, treatment and disposal of wastewater}}{\text{Total megalitres of wastewater treated}}$$

Operating costs for collection, treatment and disposal of wastewater per megalitre

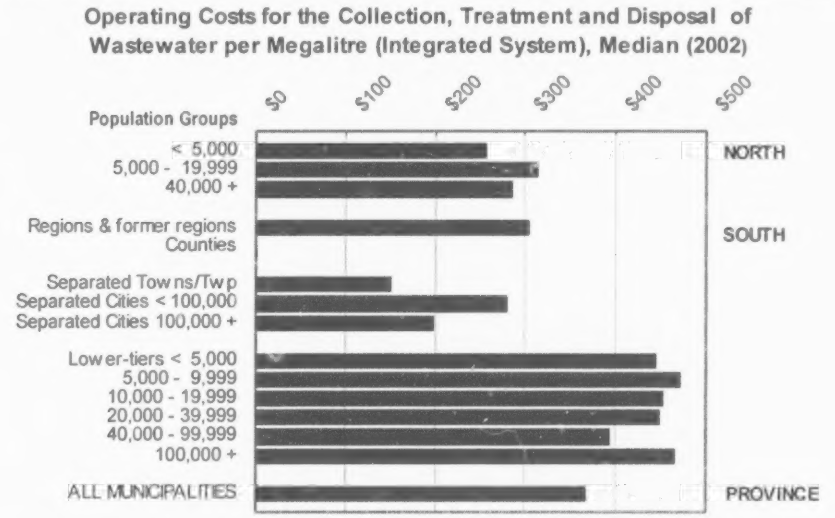
			2002	2001
Population	Reporting #	Range $	Median $	Median $
NORTH				
< 5,000	19	112 to 915	258	299
5,000 – 19,999	10	126 to 423	315	337
40,000 +	3	168 to 293	286	232
SOUTH				
Regions & Former Regions	9	166 to 912	305	315
Counties				
Single-tiers				
Separated Towns/Twp	4	82 to 483	151	262
Separated Cities < 100,000	14	150 to 548	280	290
Separated Cities 100,000 +	4	194 to 368	198	210
Lower-tiers				
< 5,000	13	168 to 2,647	446	500
5,000 – 9,999	27	105 to 1,879	471	397
10,000 – 19,999	25	176 to 6,846	452	359
20,000 – 39,999	9	284 to 1,640	449	440
40,000 – 99,999	2	393 to 535	393	249
100,000 +	3	448 to 479	466	
ALL MUNICIPALITIES	142	82 to 6,842	368	329

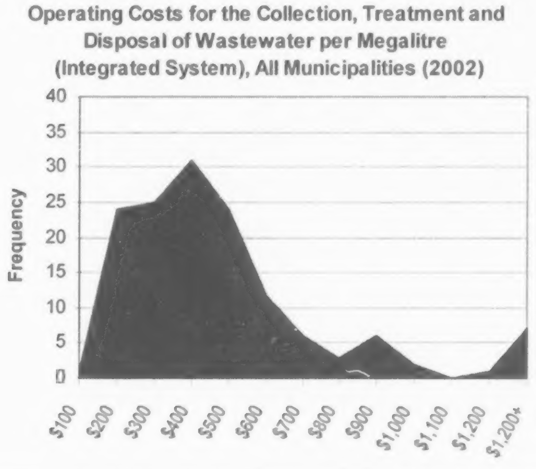
FIR reference: SLC 91 3105 13. In 2002, 142 municipalities reported the measure, subject to conditions and in 2001, 132 reported.

Municipalities were excluded if:

- The number of megalitres exceeded 1.25 times the population in SLC 90 0020 01.
- Megalitres were less than or equal to 5.0.
- Operating costs for wastewater treatment and disposal were greater than $2. Also, operating costs for wastewater collection were greater than $2 if that measure was completed. Token values for operating costs could result if the municipality was attempting to report only the integrated measure for wastewater.
- Two municipalities were not included because they indicated they reported cubic metres, instead of megalitres in the denominator.

Wastewater Collection, Treatment and Disposal (Integrated System):
Operating costs for the collection, treatment and disposal of wastewater per megalitre.





Objective Efficient municipal wastewater services.

Notes For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reported only the integrated measure for wastewater collection, treatment and disposal in 2001. In 2002, municipalities could report the integrated measure and the individual measures.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Whether costs for wastewater collection and treatment/disposal are recorded separately or are estimated.
- Population and density of service area.
- Urban/rural mix, e.g. whether collection and treatment service is provided to rural areas.
- Precipitation and severity of storm events.
- Extent of water infiltration into sewers.
- Division of responsibility for wastewater collection between local area municipalities and regional municipality. For example, the local municipality may be responsible for sewage collection from the street line to the trunk line. The regional municipality may be responsible for sewage conveyance from the municipality to water pollution control plants.
- Errors in the calculation of megalitres.

Collection of wastewater is also influenced by:

- Age, condition and size of the wastewater collection system.
- Type of wastewater mains, e.g. gravity fed, low pressure.
- Variations in flow.
- General maintenance, inspection and flow monitoring.
- Number and size of pumping stations.

Treatment and disposal is influenced by:

- Number, size and scale of municipal treatment plants.
- Whether plants receive both sewage and storm water.
- Volume and strength of industrial sewage.
- Type of treatment (primary, secondary, tertiary or lagoon).
- Treatment levels.
- Wastewater testing.
- Destination of the plant's effluent (lake vs. stream).
- Method of sludge disposal (landfill, incineration or land application).
- Increases in the cost of disposing of biosolids.
- Certificate of Approval requirements (C of A).

Wastewater Main Backups: Effectiveness

Number of wastewater main backups per 100 kilometres of wastewater main in a year.

$$\frac{\text{Total number of backed up wastewater connections}}{\text{Kilometres of wastewater mains / 100}}$$

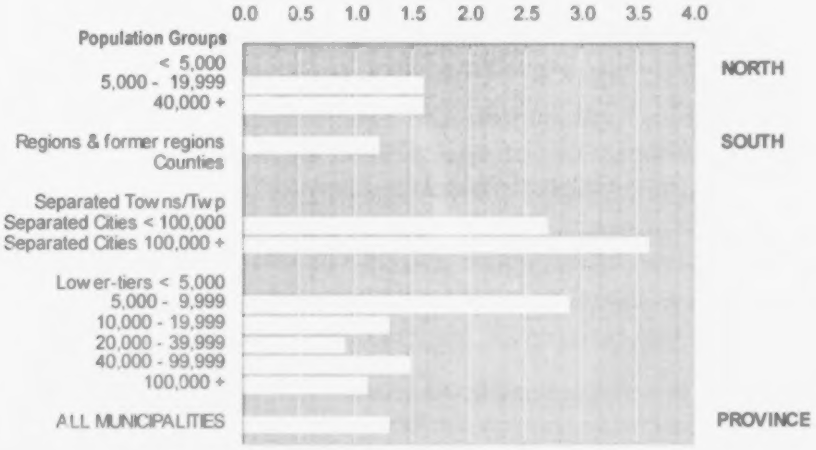
Number of wastewater main backups per 100 kilometres of wastewater main in a year

Population	Reporting #	Range #	2002 Median #	2001 Median #
NORTH				
< 5,000	38	0.0 to 2,500.0	0.0	0.0
5,000 – 19,999	10	0.0 to 253.7	1.6	0.3
40,000 +	2	1.6 to 93.9	1.6	4.0
SOUTH				
Regions & Former Regions	10	0.0 to 5.8	1.2	0.3
Counties				
Single-tiers				
Separated Towns/Twp	4	0.0 to 11.1	0.0	0.6
Separated Cities < 100,000	16	0.0 to 132.4	2.7	0.3
Separated Cities 100,000 +	4	1.2 to 40.4	3.6	2.4
Lower-tiers				
< 5,000	18	0.0 to 27.3	0.0	0.0
5,000 – 9,999	35	0.0 to 183.3	2.9	0.0
10,000 – 19,999	42	0.0 to 29.0	1.3	0.0
20,000 – 39,999	12	0.0 to 18.2	0.9	2.1
40,000 – 99,999	5	0.3 to 3.1	1.5	1.8
100,000 +	6	0.3 to 6.0	1.1	0.4
ALL MUNICIPALITIES	202	0.0 to 2,500.0	1.3	0.0

FIR reference: SLC 92 3154 07. In 2002, 202 municipalities reported the measure and in 2001, 201 municipalities reported the measure.

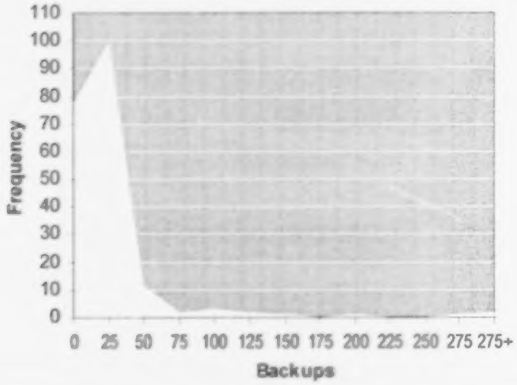
In 2001, municipalities were excluded if the denominator did not equal the number of kilometres of wastewater main in the efficiency measure in SLC 91 3103 06 divided by 100 ± 1.5. In 2002, the need for the condition was eliminated because the number of kilometres from the efficiency measure was carried forward and divided by 100.

Number of Wastewater Main Backups per 100 KM of Wastewater Main in a Year, Median (2002)



Wastewater Main Backups:
Number of wastewater main backups per 100 kilometres of wastewater main in a year.

Number of Wastewater Main Backups per 100 KM of Wastewater Main in a Year, All Municipalities (2002)



Objective

Municipal sewage management practices prevent environmental and human health hazards.

Factors affecting results

Results are influenced by:

- Error in calculation of denominator: kilometres must be divided by 100.
- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Kilometres in the sewer system.
- Extent of inflow and infiltration to sewers.
- Number and severity of storm events.
- Age, condition, materials of collection system.
- Illegal connections.
- Downspouts directly connected to combined sewage systems.
- Level of precipitation.
- Definition of wastewater main backups and method of measuring number of backups.

Wastewater Bypasses Treatment: Effectiveness

Percentage of wastewater estimated to have bypassed treatment.

$$\frac{\text{Estimated megalitres of untreated wastewater}}{\text{Total megalitres of wastewater, including treated and untreated wastewater}} \times 100$$

Percentage of wastewater estimated to have bypassed treatment

Population	Reporting #	Range %	2002 Median %	2001 Median %
NORTH				
< 5,000	24	0.00% to 24.56%	0.00%	0.00%
5,000 – 19,999	8	0.00% to 2.25%	0.13%	0.13%
40,000 +	2	0.00%	0.00%	0.00%
SOUTH				
Regions & Former Regions	9	0.00% to 2.12%	0.00%	0.20%
Counties				
Single-tiers				
Separated Towns/Twp	2	0.01% to 0.03%	0.01%	0.00%
Separated Cities < 100,000	11	0.00% to 0.10%	0.00%	0.00%
Separated Cities 100,000 +	2	0.05% to 0.67%	0.05%	1.39%
Lower-tiers				
< 5,000	14	0.00% to 0.11%	0.00%	0.00%
5,000 – 9,999	27	0.00% to 66.47%	0.00%	0.00%
10,000 – 19,999	25	0.00% to 15.89%	0.00%	0.00%
20,000 – 39,999	7	0.00% to 0.22%	0.00%	0.00%
40,000 – 99,999	1	0.00%	0.00%	0.00%
100,000 +	1	0.00%	0.00%	0.00%
ALL MUNICIPALITIES	133	0.00% to 66.47%	0.00%	0.00%

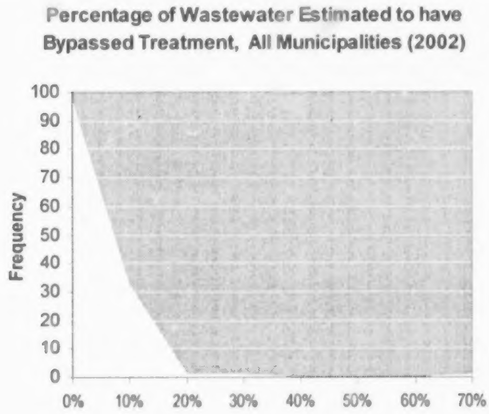
FIR reference: SLC 92 3155 07. In 2002, 133 municipalities reported the measures, subject to conditions and in 2001, 107 reported.

Municipalities were excluded if:

- Total megalitres of treated + untreated wastewater in the denominator is greater than 1.25 times the population in SLC 90 0020 01.
- Megalitres of treated + untreated wastewater in the denominator is less than 5.0.
- Megalitres of treated wastewater in the efficiency measure in SLC 91 3105 11 does not equal treated megalitres calculated by subtracting estimated megalitres of untreated wastewater in SLC 91 3155 05 (numerator) from megalitres of treated + untreated wastewater in SLC 91 3155 06 (denominator).

The measure is not graphed because median results for all by three groups equal 0%.

Wastewater Bypasses Treatment:
Percentage of wastewater estimated to have bypassed treatment.


Percentage of Wastewater Estimated to have Bypassed Treatment, All Municipalities (2002)

Objective

Municipal sewage management practices prevent environmental and human health hazards.

Notes on Calculations

Municipalities had difficulty calculating megalitres in this measure. A megalitre equals 1,000,000 litres or 1,000 cubic metres.

Twenty five percent of the municipalities reporting the measure in the Financial Information Return were not included in the summary because of calculation errors.

The denominator of the effectiveness measure is megalitres of treated wastewater plus megalitres of untreated wastewater. For verification, this amount less megalitres of untreated wastewater in the numerator were compared to estimated megalitres of treated wastewater in the efficiency measure.

In the frequency distribution, the first interval is 0%, the second interval is 10%, etc. Although intervals generally represent a range of values, zero was selected as the first interval, because most municipalities reported 0% of wastewater bypassed treatment.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Extent of inflow and infiltration to sewers.
- Illegal connections.
- Downspouts directly connected to combined sewage systems.
- Level of precipitation.
- Number and severity of storm events.
- Capacity of treatment plant.
- Error in calculation of megalitres.

Urban Storm Water Management: Efficiency

Operating costs for urban storm water management (collection, treatment, disposal) per kilometre of drainage system.

$$\frac{\text{Operating costs of urban storm water management}}{\text{Total kilometres of urban drainage system}}$$

Operating costs for urban storm water management (collection, treatment, disposal) per kilometres of drainage system

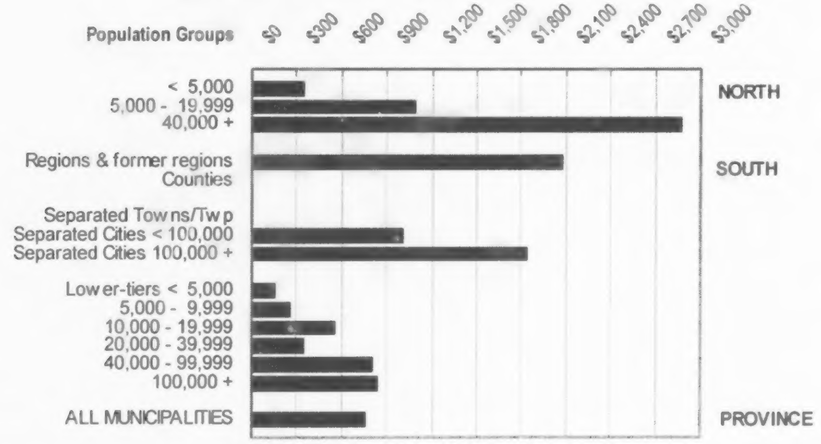
			2002
Population	Reporting #	Range $	Median $
NORTH			
< 5,000	4	322 to 2,360	356
5,000 – 19,999	4	88 to 1,352	1,093
40,000 +	2	2,872 to 3,785	2,872
SOUTH			
Regions & Former Regions	3	1,498 to 3,338	2,084
Counties			
Single-tiers			
Separated Towns/Twp			
Separated Cities < 100,000	11	223 to 2,547	1,016
Separated Cities 100,000 +	3	1,212 to 1,848	1,836
Lower-tiers			
< 5,000	4	121 to 335	162
5,000 – 9,999	6	25 to 1,399	266
10,000 – 19,999	9	71 to 3,619	561
20,000 – 39,999	4	215 to 583	357
40,000 – 99,999	7	503 to 2,849	812
100,000 +	9	650 to 1,803	839
ALL MUNICIPALITIES	66	25 to 3,785	762

FIR reference: SLC 91 3201 13.

Condition:

Denominator is less than 40,000 kilometres of urban drainage system (SLC 913202 11 < 40,000).

Operating Costs for Urban Storm Water Management per KM of Drainage System, Median (2002)



Rural Storm Water Management: Efficiency

Operating costs for rural storm water management (collection, treatment, disposal) per kilometre of drainage system.

$$\frac{\text{Operating costs of rural storm water management}}{\text{Total kilometres of rural drainage system}}$$

Operating costs for rural storm water management (collection, treatment, disposal) per kilometre of drainage system

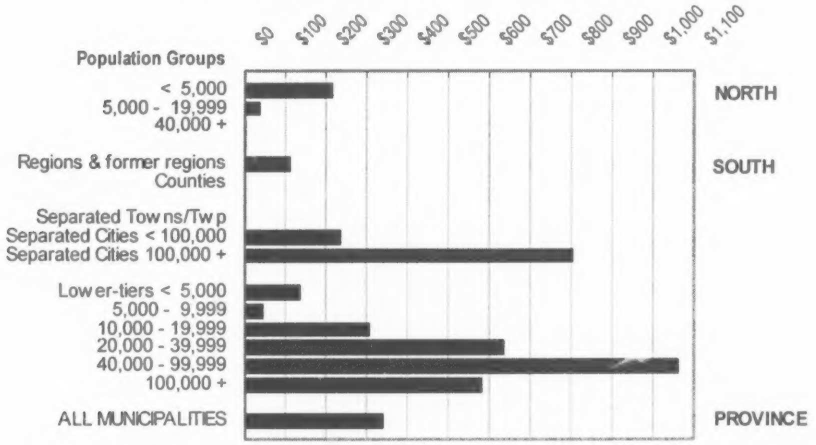
			2002
Population	Reporting #	Range $	Median $
NORTH			
< 5,000	2	218 to 669	218
5,000 – 19,999	2	36 to 45	36
40,000 +			
SOUTH			
Regions & Former Regions	1	114	114
Counties			
Single-tiers			
Separated Towns/Twp			
Separated Cities < 100,000	3	111 to 2,592	237
Separated Cities 100,000 +	1	805	805
Lower-tiers			
< 5,000	3	36 to 145	139
5,000 – 9,999	1	45	45
10,000 – 19,999	2	308 to 484	308
20,000 – 39,999	3	276 to 1,290	639
40,000 – 99,999	3	340 to 1,239	1,064
100,000 +	6	97 to 2,111	583
ALL MUNICIPALITIES	27	36 to 2,592	340

FIR reference: SLC 91 3202 13.

Conditions:

Municipalities were not included in the summary if the measure exceeded $10,000. (SLC 92 3202 13 < 10,000)

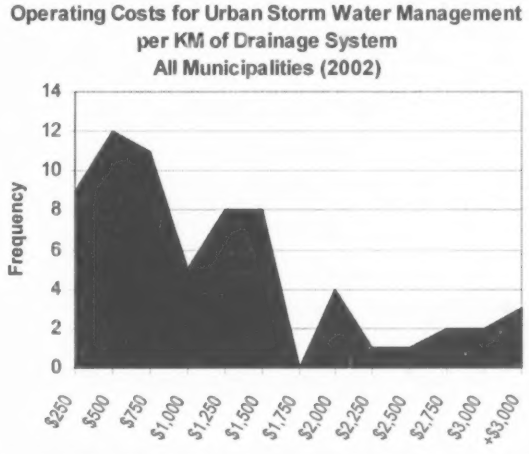
Operating Costs for Rural Storm Water Management per KM of Drainage System, Median (2002)

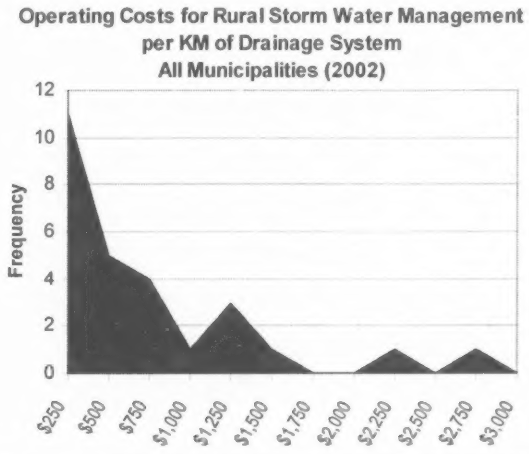


Urban and Rural Storm Water Management: Efficiency

Operating costs for urban storm water management (collection, treatment, disposal) per kilometre of drainage system.

Operating costs for rural storm water management (collection, treatment, disposal) per kilometre of drainage system.





Objective Efficient urban and rural storm water management

Notes This measure is reported only by municipalities with separate storm water systems.

Urban and Rural Storm Water Management: Efficiency

Operating costs for urban and rural storm water management (collection, treatment, disposal) per kilometres of drainage system.

A small number of municipalities reported the storm water management measures. Many municipalities reported that they did not have separate accounts for urban storm water management and rural storm water management. As a result, they estimated costs. The urban and rural storm water measures may include operating costs reported in the Financial Information Return on the line for roadways.

Factors affecting results

Results are influenced by:

- Whether costs for the urban storm water system are recorded separately from the rural storm water system or are estimated.
- Urban and rural mix.
- Geographic size of service area.
- Urban form: numerous small urban areas versus large compact urban area.
- Local service level standards, e.g. frequency of cleaning and inspection.
- Availability of data regarding the number of kilometres in urban and rural drainage system.

Treatment of Drinking Water: Efficiency

Operating costs for the treatment of drinking water per megalitre.

$$\frac{\text{Operating costs for the treatment of drinking quality water}}{\text{Total megalitres of treated drinking water}}$$

Operating costs for the treatment of drinking water per megalitre

			2002	2001
Population	Reporting #	Range $	Median $	Median $
NORTH				
< 5,000	37	18 to 3,503	667	404
5,000 – 19,999	10	159 to 4,266	277	136
40,000 +	2	166 to 328	166	
SOUTH				
Regions & Former Regions	10	72 to 475	149	117
Counties				
Single-tiers				
Separated Towns/Twp	4	124 to 300	187	
Separated Cities < 100,000	13	95 to 251	193	213
Separated Cities 100,000 +	4	64 to 202	68	56
Lower-tiers				
< 5,000	12	15 to 2,271	359	303
5,000 – 9,999	27	103 to 2,011	448	196
10,000 – 19,999	34	93 to 741	285	291
20,000 – 39,999	8	178 to 437	221	415
40,000 – 99,999	2	129 to 295	129	118
100,000 +	3	422 to 459	422	413
ALL MUNICIPALITIES	166	15 to 4,266	298	229

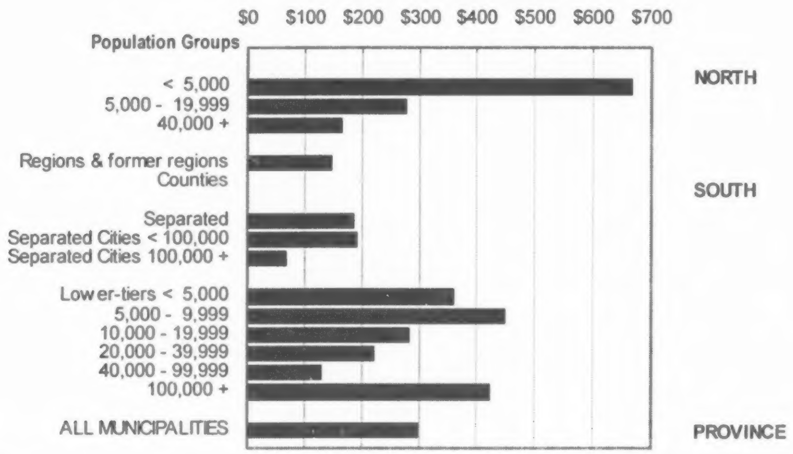
FIR reference: SLC 91 3303 13. In 2002, 166 municipalities reported the measure and met the conditions; in 2001 the number was 39. In 2001, municipalities reporting the integrated measure could not report individual measures.

Municipalities were excluded if:

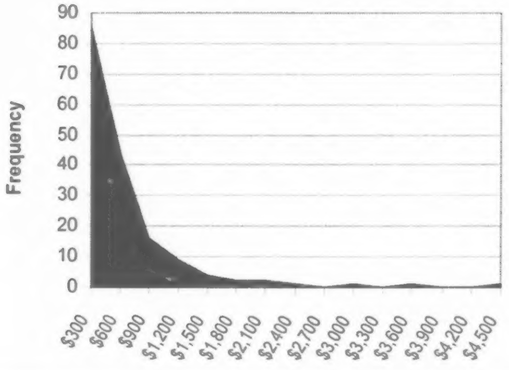
- Total megalitres of treated water in the denominator is greater than 1.25 times the population in SLC 90 0020 01.
- The municipality intended to complete only the integrated measure for drinking water with the result that operating costs for the water treatment measure or the water distribution measure were less than $2.
- Less than five megalitres were reported in the denominator.
- A municipality was excluded because it indicated in the Notes it reportied cubic metres instead of megalitres in the denominator.

Treatment of Drinking Water: Efficiency

Operating costs for the treatment of drinking quality water per megalitre.



Operating Costs for the Treatment of Drinking Water per Megalitre, 2002 (Median)



Operating Costs for the Treatment of Drinking Water per Megalitre, All Municipalities (2002)

Objective Efficient treatment of drinking quality water.

Notes If the municipality has an integrated water system, it reports only the measure for the treatment and distribution of drinking quality water per megalitre and not the individual measures.

Factors affecting results

Results are influenced by:

- Whether costs for water treatment are recorded separately from water distribution or are estimated.
- Utilization (residential vs. industrial).
- Source of raw water (lake vs. wells).
- Quality of raw water.
- Type of treatment.
- Number and capacity of water treatment plants.
- Number of private wells.
- Age and condition of treatment plants.
- Distance of raw water to treatment plants.
- Service area and consumption levels.
- Competitive market conditions.

Distribution of Drinking Quality Water:
Operating costs for the distribution of drinking water per kilometre of water distribution pipe.

$$\frac{\text{Operating costs for the distribution of drinking quality water}}{\text{Total kilometres of water distribution pipe}}$$

Operating costs for the distribution of drinking water per kilometre of water distribution pipe

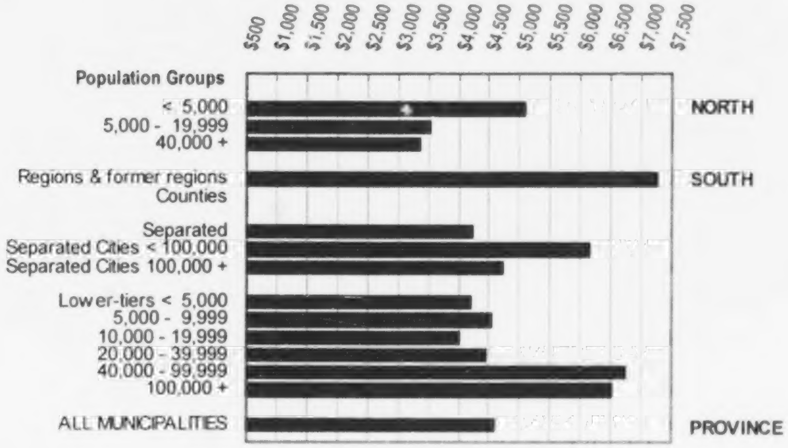
			2002	2001
Population	Reporting \#	Range $	Median $	Median $
NORTH				
< 5,000	21	271 to 19,127	5,107	3,196
5,000 – 19,999	9	620 to 10,291	3,536	2,764
40,000 +	2	3,381 to 6,416	3,381	
SOUTH				
Regions & Former Regions	9	1,637 to 16,644	7,283	6,644
Counties				
Single-tiers				
Separated Towns/Twp	4	3,494 to 19,645	4,242	
Separated Cities < 100,000	15	2,327 to 9,536	6,162	6,960
Separated Cities 100,000 +	4	3,074 to 7,424	4,743	7,786
Lower-tiers				
< 5,000	21	83 to 12,162	4,209	2,080
5,000 – 9,999	33	540 to 20,865	4,540	4,185
10,000 – 19,999	43	64 to 13,510	4,018	4,168
20,000 – 39,999	12	1,341 to 21,786	4,474	4,524
40,000 – 99,999	5	3,256 to 11,740	6,738	5,121
100,000 +	6	3,009 to 10,678	6,524	6,521
ALL MUNICIPALITIES	184	64 to 21,786	4,603	4,482

FIR reference: SLC 91 3304 13. In 2002, 184 municipalities reported the measure and met the conditions; in 2001 the number was 65. In 2001, municipalities reporting the integrated measure could not report individual measures.

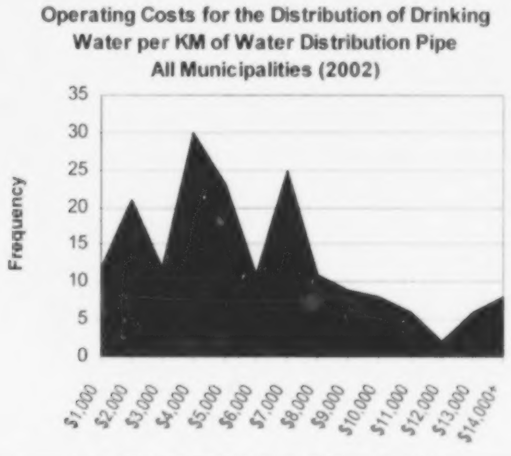
Municipalities were excluded if:

- Less than 5 kilometres of water distribution pipe were reported in the denominator.
- The municipality intended to complete only the integrated measure for drinking water with the result that operating costs for the water treatment measure or the water distribution measure were less than $2.

Operating Costs for the Distribution of Drinking Water per KM of Water Distribution Pipe, 2002 (Median)



Distribution of Drinking Water:
Operating costs for the distribution of drinking water per kilometre of water distribution pipe.



Objective Efficient distribution costs of drinking water.

Notes If the municipality has an integrated water system, it reports only the measure for the treatment and distribution of drinking water per megalitre. It does not report the individual measures.

Factors affecting results

Results are influenced by:

- Whether costs for water treatment are recorded separately from water distribution or are estimated Service area.
- Service area.
- Consumption levels.
- Number of connections.
- Number and capacity of pumping stations.
- Kilometres of water distribution pipe.
- Age and condition of distribution system.

Smaller municipalities with few kilometres of water distribution pipe may have higher unit costs for this measure.

Treatment and Distribution of Drinking Water (Integrated System):

Operating costs for the treatment and distribution of drinking water per megalitre.

$$\frac{\text{Operating costs for the treatment and distribution of drinking water}}{\text{Total megalitres of drinking water treated}}$$

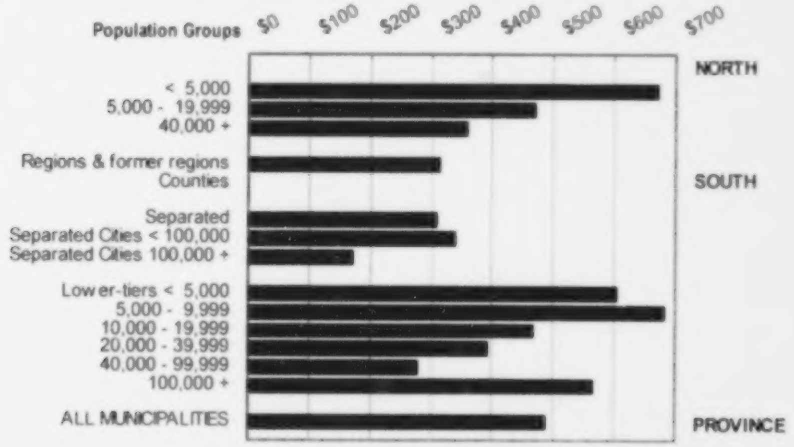
Operating costs for the treatment and distribution of drinking water per megalitre

Population	Reporting \#	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	25	138 to 7,430	673	608
5,000 – 19,999	10	286 to 782	471	383
40,000 +	3	354 to 427	361	380
SOUTH				
Regions & Former Regions	9	210 to 593	315	260
Counties				
Single-tiers				
Separated Towns/Twp	4	257 to 476	309	251
Separated Cities < 100,000	14	217 to 795	341	365
Separated Cities 100,000 +	4	123 to 470	173	201
Lower-tiers				
< 5,000	13	18 to 4,543	606	740
5,000 – 9,999	32	183 to 2,770	683	509
10,000 – 19,999	32	196 to 937	468	389
20,000 – 39,999	8	304 to 675	392	405
40,000 – 99,999	2	280 to 631	280	
100,000 +	3	540 to 584	565	580
ALL MUNICIPALITIES	159	18 to 7,430	487	471

FIR reference: SLC 91 3305 13. In 2002 159 municipalities reported the measure and met the conditions; in 2001 the number was 142. Municipalities were excluded if:

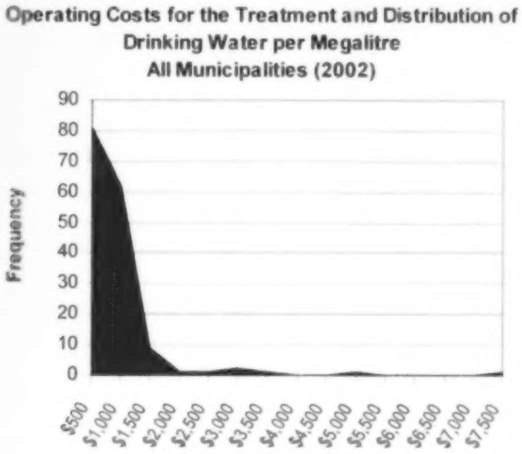
- Total megalitres of treated drinking water in the denominator is greater than 1.25 times the population entered in SLC 90 0020 01.
- Megalitres in the denominator were less than five megalitres.
- Two municipalities were excluded because they indicated in the Notes that cubic metres were used instead of megalitres in the denominator.

Operating Costs for the Treatment and Distribution of Drinking Water per Megalitre, 2002 (Median)



Treatment and Distribution of Drinking Water (Integrated System):

Operating costs for the treatment and distribution of drinking water per megalitre.



Operating Costs for the Treatment and Distribution of Drinking Water per Megalitre All Municipalities (2002)

Objective Efficient treatment and distribution costs of drinking water.

Note Only single-tiers report this measure or municipalities with complete responsibility for the treatment and distribution of drinking water. Municipalities reporting this measure did not report the individual measures for treatment and distribution.

Factors affecting results

Treatment results are influenced by:

- Whether costs for water treatment are recorded separately from water distribution or are estimated.
- Utilization (residential vs. industrial).
- Source of raw water (lake vs. wells).
- Quality of raw water.
- Type of treatment.
- Number and capacity of water treatment plants.
- Number of private wells.
- Age and condition of treatment plants.
- Distance of raw water to treatment plants.
- Service area and consumption levels.
- Competitive market conditions.

Distribution results are influenced by:

- Service area.
- Consumption levels.
- Number of connections.
- Number and capacity of pumping stations.
- Kilometres of water distribution pipe.
- Age and condition of distribution system.

Boil Water Advisories: Effectiveness

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.

$$\frac{\text{Summation of: (Number of boil water days times the number of connections affected)}}{\text{Total connections in the service area}}$$

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.

			2002	2001
Population	Reporting #	Range #	Median #	Median #
NORTH				
< 5,000	46	0 to 365	0	0
5,000 – 19,999	11	0	0	0
40,000 +	3	0	0	0
SOUTH				
Regions & Former Regions	9	0 to 0.2	0	0
Counties				10
Single-tiers				
Separated Towns/Twp	3	0	0	0
Separated Cities < 100,000	14	0 to 2	0	0
Separated Cities 100,000 +	2	0 to 0.01	0	0
Lower-tiers				
< 5,000	28	0 to 0.3	0	0
5,000 – 9,999	38	0 to 15	0	0
10,000 – 19,999	36	0 to 107	0	0
20,000 – 39,999	11	0 to 7	0	0
40,000 – 99,999	2	0	0	0
100,000 +	3	0	0	0
ALL MUNICIPALITIES	206	0 to 365	0	0

FIR reference: SLC 92 3355 07. In 2002, 206 municipalities reported the measure. In 2001, 187 reported the measure. In 2001, only one county reported; therefore the median for the group equals the result for that county.

All municipalities reporting the measure are included.

Results are not graphed because the median for all groups in 2002 is zero.

Boil Water Advisories: Effectiveness

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect
All Municipalities (2002)
Frequency
180
160
140
120
100
80
60
40
20
0
0
30
60
90
120
150
180
210
240
270
300
330
365
Weighted Number of Days

Objective Water is safe and meets local needs.

Notes This measure represents the weighted number of days a boil water advisory is in effect for a municipal water supply. The number of boil water days is weighted by the number of connections affected. For example, if a boil water is in effect for 20 days and 50% of the households are affected, then the weighted number of days is 10 days.

In the frequency distribution, the first interval is 0 and the second interval is labelled 30 and includes from 1 to 30 weighted boil water days. Although intervals generally represent a range of values, zero was selected as an interval because most municipalities had zero weighted boil water days. It is important to distinguish this group from those municipalities who had more than one weighted boil water day.

Factors affecting results Results are influenced by:

- Source of drinking water (lake vs. well).
- The number of individual sources supplying the drinking water system.
- Type of water treatment.
- Capacity to clean, treat and deliver safe drinking water.
- Testing and quality control of raw water and treated water.

- Extent of municiplity's flushing cleaning and flushing program for water mains.
- State of repair of water mains.
- Purchase of drinking water from another municipality.

If a municipality purchases treated water from another municipality, the municipality making the purchase is subject to any boil water advisories imposed on the municipality providing the treated water.

Breaks in Water Mains: Effectiveness

Number of breaks in water mains per 100 kilometres of water main pipe in a year.

$$\frac{\text{Number of breaks in water mains in a year}}{\text{Total kilometres of water main pipe / 100}}$$

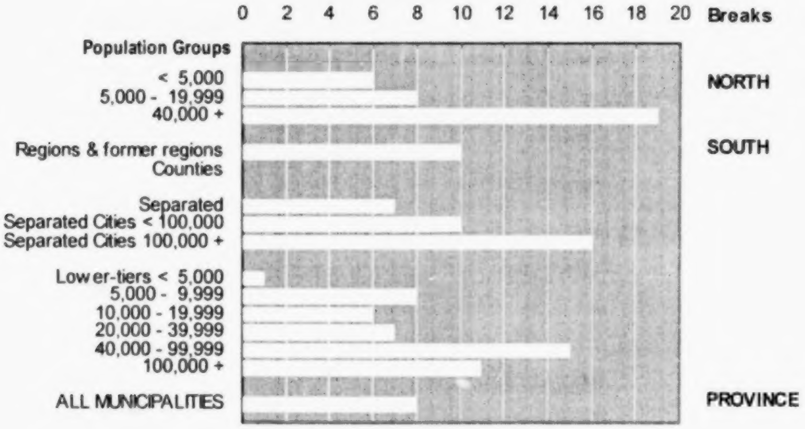
Number of breaks in water mains per 100 kilometres of water main pipe in a year.

			2002	2001
Population	Reporting \#	Range \#	Median \#	Median \#
NORTH				
< 5,000	46	0 to 121	6	0
5,000 – 19,999	10	0 to 49	8	0.2
40,000 +	2	19	19	17
SOUTH				
Regions & Former Regions	11	0 to 16	10	4
Counties				
Single-tiers				
Separated Towns/Twp	4	0 to 19	7	0.1
Separated Cities < 100,000	16	1 to 44	10	7
Separated Cities 100,000 +	4	14 to 37	16	12
Lower-tiers				
< 5,000	29	0 to 65	1	0.1
5,000 – 9,999	45	0 to 66	8	1
10,000 – 19,999	48	0 to 34	6	3
20,000 – 39,999	12	0 to 68	7	8
40,000 – 99,999	5	11 to 40	15	16
100,000 +	6	5 to 33	11	9
ALL MUNICIPALITIES	238	0 to 121	8	2

FIR reference: SLC 92 3356 07. In 2002, 238 municipalities reported the measure and in 2001 222 municipalities reported it.

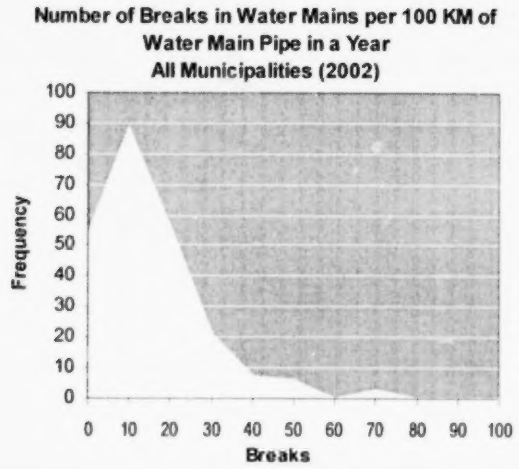
NOTES: In the 2002 FIR, kilometres of water distribution pipe are carried forward from the efficiency measure (SLC 91 3304 11/100). Since the carry forward was not present in 2001, a municipality was excluded if kilometres of water distribution pipe in SLC 92 3356 06 did not equal kilometres of pipe in (SLC 91 3304 11 / 100) ± 1.5.

Number of Water Main Breaks per 100 KM of Water Distribution Pipe, 2002 (Median)



Breaks in Water Mains: Effectiveness

Number of breaks in water mains per 100 kilometres of water main pipe in a year.



Objective

Improve system reliability.

Notes

In the frequency distribution, the first interval is 0 and the second interval is labelled 10 and includes 1 to 10 breaks. Although intervals generally represent a range of values, zero was selected as an interval because many municipalities reported zero breaks.

Factors affecting results

Results are influenced by:

- Age of water main pipes and fittings.
- Pipe material.
- Whether or not cathodic protection is in place.
- Depth of water main pipe.
- Soil conditions.
- Pressure range and fluctuation.
- Hydro faults.
- Programs for maintenance and rehabilitation of water mains.
- Severity of winter weather and frost penetration.
- Water temperature.
- Corrosion.
- Breaks due to construction.
- Hydro faults.

Garbage Collection: Efficiency

Operating costs for garbage collection per tonne.

$$\frac{\text{Operating costs for garbage collection}}{\text{Total tonnes received from all property classes}}$$

Operating costs for garbage collection per tonne

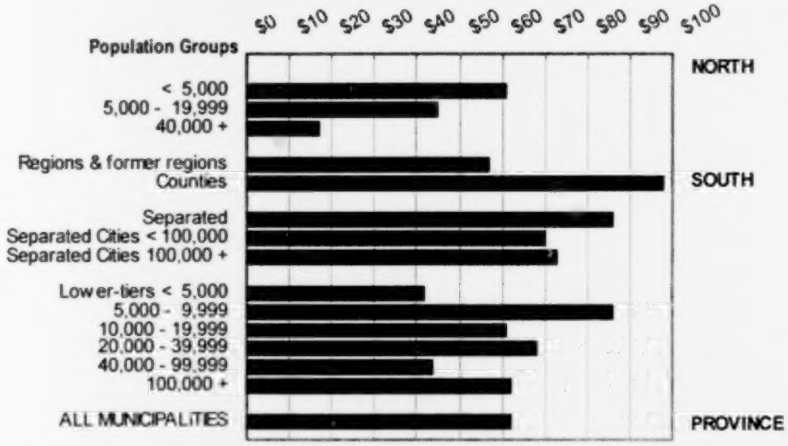
Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	8	32 to 4,281	61	62
5,000 – 19,999	4	39 to 84	45	
40,000 +	3	14 to 109	17	39
SOUTH				
Regions & Former Regions	9	42 to 104	57	
Counties	1	98	98	
Single-tiers				
Separated Towns/Twp	1	86	86	
Separated Cities < 100,000	14	30 to 248	70	
Separated Cities 100,000 +	3	66 to 82	73	
Lower-tiers				
< 5,000	4	23 to 96	42	61
5,000 – 9,999	5	33 to 118	86	87
10,000 – 19,999	12	19 to 114	61	99
20,000 – 39,999	5	55 to 92	68	52
40,000 – 99,999	5	34 to 81	44	28
100,000 +	3	50 to 66	62	113
ALL MUNICIPALITIES	77	14 to 4,281	62	61

FIR reference: SLC 91 3402 13. In 2002, 77 municipalities reported the measure, subject to conditions. However, 163 municipalities did not indicate the type of units they reported. In 2001, 20 municipalities reported the measure. However, in 2001, municipalities reporting the integrated measure could not report individual solid waste measures.

Conditions:

- Units selected in the denominator in SLC 91 3402 14 are "per tonne" .
- A lower-tier municipality was excluded because garbage disposal was an upper-tier function.

Operating Costs for the Collection of Garbage per Tonne
2002 (Median)



Garbage Collection: Efficiency
Operating costs for garbage collection per household.

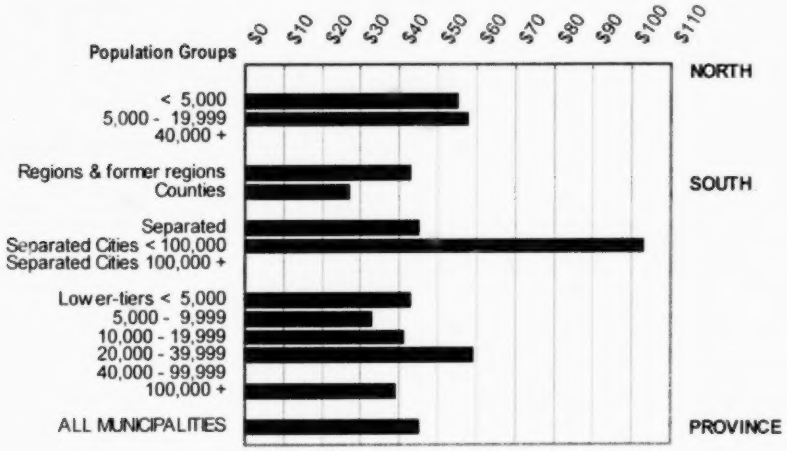
$$\frac{\text{Operating costs for garbage collection}}{\text{Total households}}$$

Operating costs for garbage collection per household

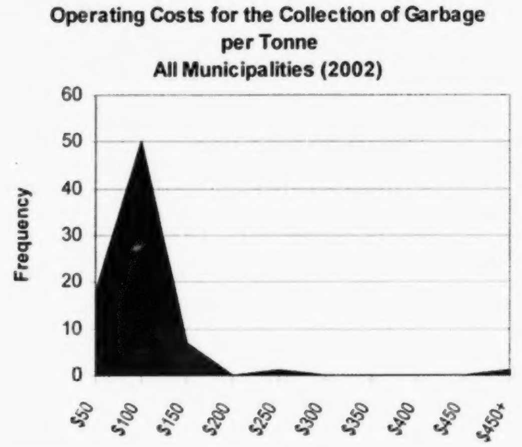
Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	49	1 to 310	55	75
5,000 – 19,999	6	40 to 88	58	23
40,000 +				
SOUTH				
Regions & Former Regions	1	43	43	
Counties	1	27	27	
Single-tiers				
Separated Towns/Twp	3	22 to 76	45	
Separated Cities < 100,000	1	103	103	
Separated Cities 100,000 +				
Lower-tiers				
< 5,000	28	9 to 109	43	44
5,000 – 9,999	31	6 to 124	33	48
10,000 – 19,999	20	10 to 132	41	60
20,000 – 39,999	3	54 to 66	59	58
40,000 – 99,999				
100,000 +	1	39	39	41
ALL MUNICIPALITIES	144	1 to 310	45	60

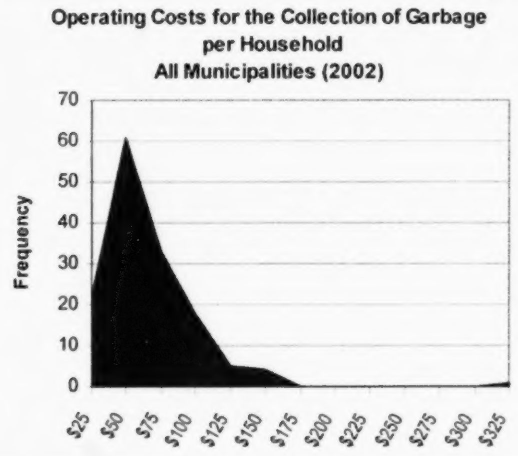
FIR reference: SLC 91 3402 13. In 2002, 144 municipalities reported the measure subject to conditions and in 2001, 44 municipalities reported. However, in 2001, municipalities reporting the integrated measure could not report individual measures for solid waste.

Condition: In 2002, only 5 municipalities selected "per household " as the unit in the denominator; 163 municipalities did not indicate the type of units used. In the table above, the denominator was deemed to be households if the denominator in SLC 91 3402 11 equalled the number of households in SLC 90 0010 01 or SLC 90 0001 02.


Operating Costs for the Collection of Garbage per Household 2002 (Median)

Solid Waste: Efficiency
Operating costs for garbage collection per tonne or per household.


Operating Costs for the Collection of Garbage per Tonne All Municipalities (2002)


Operating Costs for the Collection of Garbage per Household All Municipalities (2002)

Objectives Efficient garbage collection services.

Notes If a municipality uses households for the solid waste measures, total households are reported, not the number of households served. If a municipality provides collection to relatively few households, the efficiency measure may appear low because operating costs are divided by all households.

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a "tonne" is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. In 2002, municipalities reporting the integrated measure could also report the individual measures for garbage collection, garbage disposal and solid waste diversion.

Factors affecting results

Results are influenced by:

- Rural/urban mix.
- Level of garbage collection service, including percentage of residents receiving service, industrial/commercial/institutional clients, frequency of pick-up.
- Mix of residential, industrial, commercial and institutional waste.
- Urban form: distance between pick-up points and amount collected at each point.
- Haulage distance to landfill sites and transfer stations.
- Special collection services, e.g. on-call collection of bulky and white goods offered.
- Bag or container limits. Ban of leaf/yard waste and recyclables from waste collection.
- Presence of competitive market forces.
- Reliance on private contractors.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Garbage Disposal: Efficiency

Operating costs for garbage disposal per tonne.

$$\frac{\text{Operating costs for garbage disposal}}{\text{Total tonnes disposed of from all property classes}}$$

Operating costs for garbage disposal per tonne

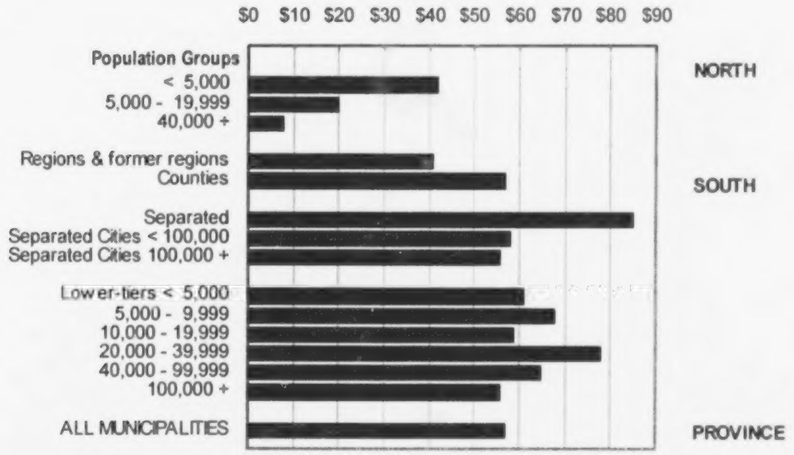
Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	12	28 to 3,180	42	39
5,000 – 19,999	5	-10 to 135	20	
40,000 +	3	-13 to 33	8	122
SOUTH				
Regions & Former Regions	11	17 to 93	41	82
Counties	3	32 to 111	57	30
Single-tiers				
Separated Towns/Twp	1	85	85	
Separated Cities < 100,000	13	-12 to 216	58	
Separated Cities 100,000 +	3	44 to 100	56	
Lower-tiers				
< 5,000	6	32 to 161	61	100
5,000 – 9,999	6	23 to 205	68	196
10,000 – 19,999	10	27 to 127	59	71
20,000 – 39,999	5	61 to 109	78	70
40,000 – 99,999	1	65	65	
100,000 +	3	44 to 63	56	
ALL MUNICIPALITIES	82	-13 to 3,180	57	70

FIR reference: SLC 91 3502 13. In 2002, 82 municipalities reported the measure, subject to conditions. In 2001, 16 municipalities reported the measure, subject to conditions. However, in 2001, municipalities reporting the integrated measure were not able to report individual measures for solid waste.

Conditions:

- "per tonne" was selected for the type of unit in the denominator in SLC 91 3502 14.
- A municipality was excluded because waste disposal was the responsibility of the upper-tier.

Operating Costs for the Garbage Disposal per Tonne
2002 (Median)



Garbage Disposal:
Operating costs for garbage disposal per household.

$$\frac{\text{Operating costs for garbage disposal}}{\text{Total households}}$$

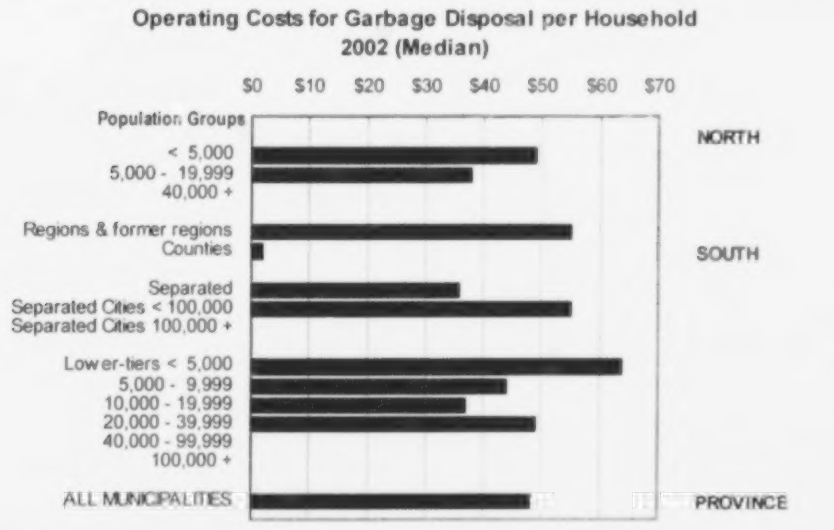
Operating costs for garbage disposal per household

Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	94	10 to 378	49	53
5,000 – 19,999	7	11 to 70	38	49
40,000 +				
SOUTH				
Regions & Former Regions	1	55	55	
Counties	5	0.04 to 122	2	
Single-tiers				
Separated Towns/Twp	3	2 to 75	36	
Separated Cities < 100,000	1	55	55	
Separated Cities 100,000 +				
Lower-tiers				
< 5,000	50	0.28 to 299	64	75
5,000 – 9,999	37	3 to 112	44	84
10,000 – 19,999	14	7 to 72	37	37
20,000 – 39,999	2	49 to 61	49	58
40,000 – 99,999				
100,000 +				
ALL MUNICIPALITIES	214	0.04 to 378	48	55

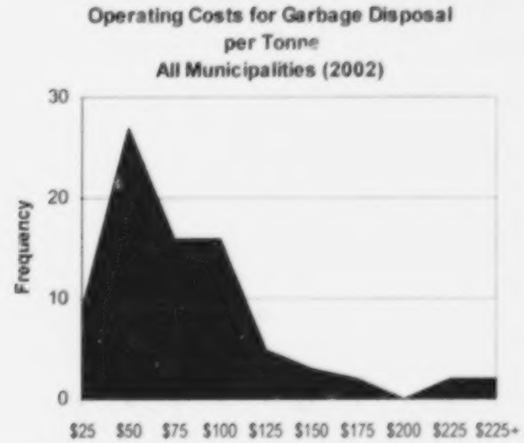
FIR reference: SLC 91 3502 13. In 2002, 214 municipalities reported the measure subject to conditions and in 2001, 103 municipalities reported the measure. However, in 2001, municipalities reporting the integrated measure could not report individual solid waste measures.

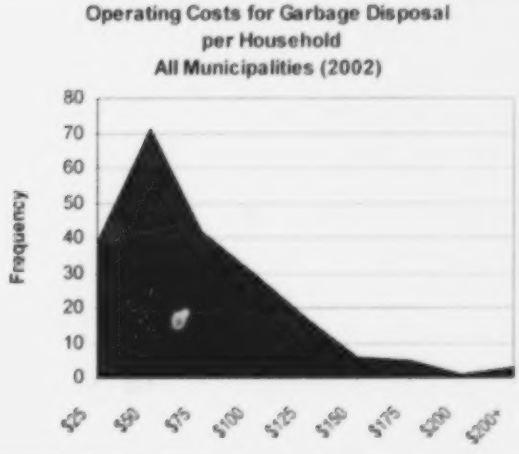
Condition:

- The denominator in SLC 91 3502 11 equals the number of households in SLC 90 0010 or SLC 90 0010 02. The type of units was not set as a condition because 227 municipalities did not indicate type of units for this measure.


Operating Costs for Garbage Disposal per Household
2002 (Median)

Solid Waste: Efficiency
Operating costs for garbage disposal per tonne or per household.


Operating Costs for Garbage Disposal per Tonne All Municipalities (2002)


Operating Costs for Garbage Disposal per Household All Municipalities (2002)

Objectives Efficient garbage disposal services.

Notes If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a "tonne" is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

The formula for the numerator, operating costs for solid waste disposal, includes selected expenditures less revenue related to the sale of resources from disposal activities. Revenue from user fees, such as tipping fees, is not part of the formula. If user fees are subtracted from expenditures, operating costs will be artificially low and the measure will be too low.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. In 2002, municipalities reporting the integrated measure could also report the individual measures for garbage collection, garbage disposal and solid waste diversion.

Factors affecting results

Results are influenced by:

- Subtracting user fees, such as tipping fees, from expenditures, rather than subtracting only revenue from the sale of resources related to disposal activities.
- Rural/urban mix.
- Mix of residential, industrial, commercial and institutional waste.
- Disposal method: landfill, incineration, composting, export, etc.
- Number of landfill sites.
- Landfill hours of operation.
- Retroactive recognition of landfill closure and post-closure costs.
- Cost of perpetual care of landfill sites.
- Recycling programs and solid waste diversion rate.
- Presence of competitive market forces.
- Reliance on private contractors.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Solid Waste Diversion: Efficiency
Operating costs for solid waste diversion (recycling) per tonne.

$$\frac{\text{Operating costs for solid waste diversion}}{\text{Total tonnes of solid waste diverted from all property classes}}$$

Operating costs for solid waste diversion (recycling) per tonne

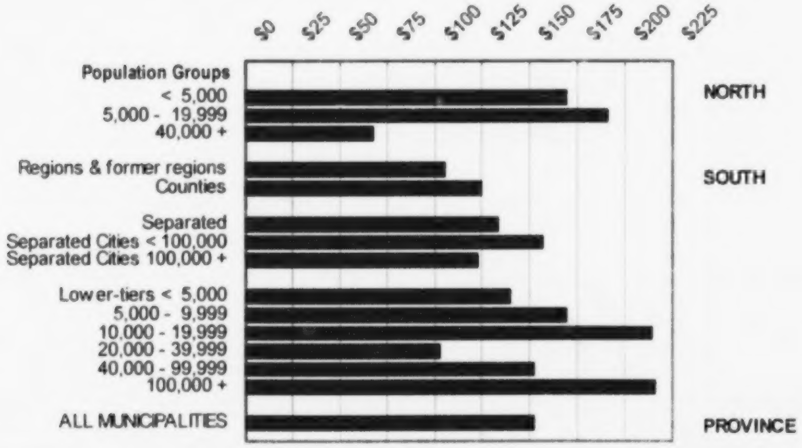
Population	Reporting #	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	6	112 to 887	169	91
5,000 – 19,999	4	69 to 511	191	
40,000 +	3	65 to 94	68	
SOUTH				
Regions & Former Regions	11	21 to 231	106	20
Counties	2	125 to 126	125	127
Single-tiers				
Separated Towns/Twp	1	134	134	
Separated Cities < 100,000	13	46 to 314	157	
Separated Cities 100,000 +	3	87 to 174	123	
Lower-tiers				
< 5,000	9	20 to 356	140	132
5,000 – 9,999	8	69 to 564	169	219
10,000 – 19,999	11	122 to 422	214	324
20,000 – 39,999	2	103 to 159	103	
40,000 – 99,999	5	20 to 294	152	106
100,000 +	3	126 to 255	216	262
ALL MUNICIPALITIES	81	20 to 887	152	132

FIR reference: SLC 91 3602 13. In 2002, 81 municipalities reported the measure subject to conditions and in 2001, only 17 municipalities reported the measure. However, in 2001, municipalities reporting the integrated measure could not report individual solid waste measures.

Condition:

- Units in SLC 91 3602 14 are "per tonne".

Operating Costs for Solid Waste Diversion (Recycling) per Tonne, 2002 (Median)



Solid Waste Diversion: Efficiency
Operating costs for solid waste diversion (recycling) per household.

$$\frac{\text{Operating costs for solid waste diversion}}{\text{Total households}}$$

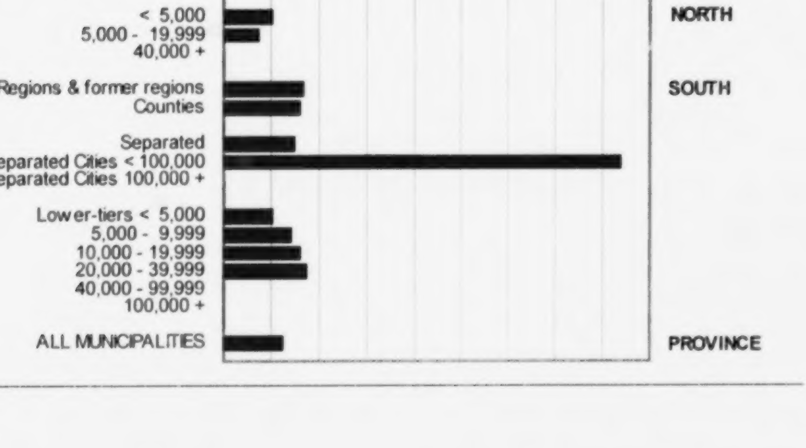
Operating costs for solid waste diversion (recycling) per household

Population	Reporting \#	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	58	1 to 86	21	10
5,000 – 19,999	5	11 to 19	15	
40,000 +				
SOUTH				
Regions & Former Regions	1	34	34	
Counties	2	32 to 41	32	
Single-tiers				
Separated Towns/Twp	3	26 to 58	30	
Separated Cities < 100,000	1	168	168	
Separated Cities 100,000 +				
Lower-tiers				
< 5,000	44	1 to 110	21	16
5,000 – 9,999	38	0.37 to 70	29	9
10,000 – 19,999	17	0.84 to 81	32	36
20,000 – 39,999	3	3 to 54	35	
40,000 – 99,999				
100,000 +				
ALL MUNICIPALITIES	172	0.37 to 168	25	16

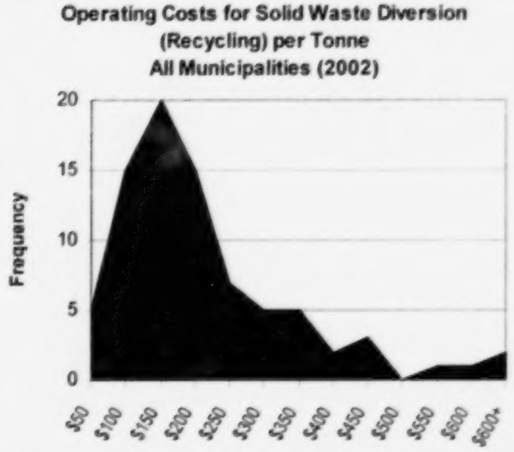
FIR reference: SLC 91 3602 13. In 2002, 172 municipalities reported the measure subject to conditions and in 2001, 47 municipalities reported. However, in 2001, municipalities reporting the integrated measure could not report individual solid waste measures. Only one municipality reports in the Separated Cities <100,000 group in the South.

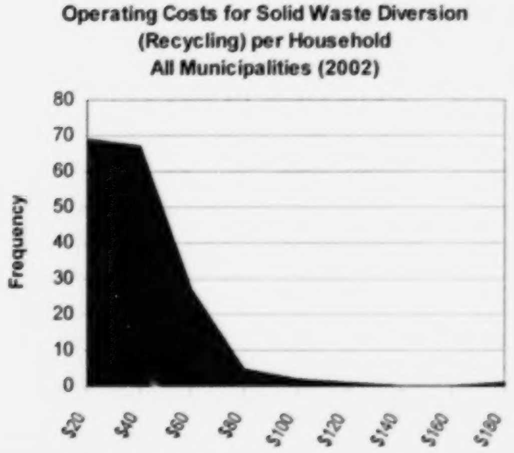
Condition: The number of households in the denominator in SLC 91 3502 11 equals the number of households in SLC 90 0010 or SLC 90 0010 02. The type of units was not set as a condition because 181 municipalities did not indicate the type of units for this measure.

Operating Costs for Solid Waste Diversion (Recycling) per Household, 2002 (Median)



Solid Waste: Efficiency
Operating costs for solid waste diversion (recycling) per tonne or per household.





Objective Efficient solid waste diversion services.

Notes If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a "tonne" is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measure represent tonnes from all property classes.

The formula for the numerator, operating costs for solid waste diversion, includes selected expenditures less revenue related to the sale of resources from diversion activities. Revenue from user fees is not part of the formula. If user fees are subtracted from expenditures, operating costs will be artificially low and the measure will be too low.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. In 2002, municipalities reporting the integrated measure could also report the individual measures for garbage collection, garbage disposal and solid waste diversion.

Factors affecting results

Results are influenced by:

- Subtracting user fees from expenditures, rather than subtracting only revenue from the sale of resources related to disposal activities.
- Rural/urban mix.
- Scope of diversion program and materials diverted.
- Mix of residential, industrial, commercial and institutional waste in diversion stream.
- Solid waste diversion rate, including level of public participation.
- Pick-up services and frequency of pick-up.
- Promotional and education budget.
- Levels of public participation.
- Haulage distance to processing and markets.
- Presence of competitive market forces.
- Reliance on private contractors.
- Prices received for recyclable material.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Precipitation which impacts the weight of materials collected.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring the waste stream.

Solid Waste Management: Efficiency

Average operating costs for solid waste management (collection, disposal, diversion) per tonne.

$$\frac{\text{Average operating costs for solid waste management}}{\text{Total tonnes of solid waste disposed of and total tonnes diverted from all property classes}}$$

Average operating costs for solid waste diversion (collection, disposal, diversion) per tonne

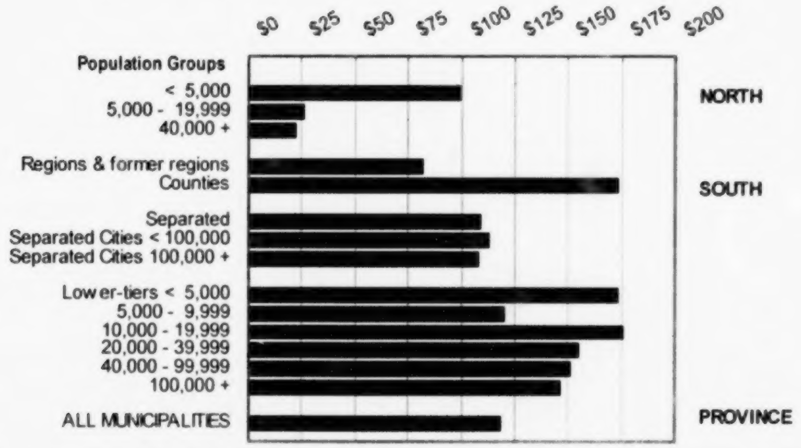
Population	Reporting \#	Range $	2002 Median $	2001 Median $
NORTH				
< 5,000	6	52 to 3,923	100	78
5,000 – 19,999	4	14 to 203	26	143
40,000 +	3	16 to 52	22	43
SOUTH				
Regions & Former Regions	8	37 to 133	82	91
Counties	1	174	174	197
Single-tiers				
Separated Towns/Twp	2	109 to 161	109	80
Separated Cities < 100,000	13	18 to 211	113	114
Separated Cities 100,000 +	4	57 to 175	108	107
Lower-tiers				
< 5,000	3	83 to 228	174	170
5,000 – 9,999	4	88 to 179	120	112
10,000 – 19,999	9	57 to 244	176	113
20,000 – 39,999	1	155	155	141
40,000 – 99,999	1	151	151	133
100,000 +	3	98 to 152	147	
ALL MUNICIPALITIES	62	14 to 3,923	119	113

FIR reference: SLC 91 3603 13. In 2001, 62 municipalities reported the measure, and in 2001 60 municipalities reported. Note that 118 municipalities did not indicate the type of units used in the denominator.

Condition:

- Units selected in the denominator in SLC 91 3603 14 are "per tonne" .

Average Operating Costs for Solid Waste Management (Collection, Disposal, Diversion) per Tonne, 2002 (Median)



Solid Waste Management: Efficiency

Average operating costs for solid waste management (collection, disposal, diversion) per household.

$$\frac{\text{Average operating costs for solid waste management}}{\text{Total households}}$$

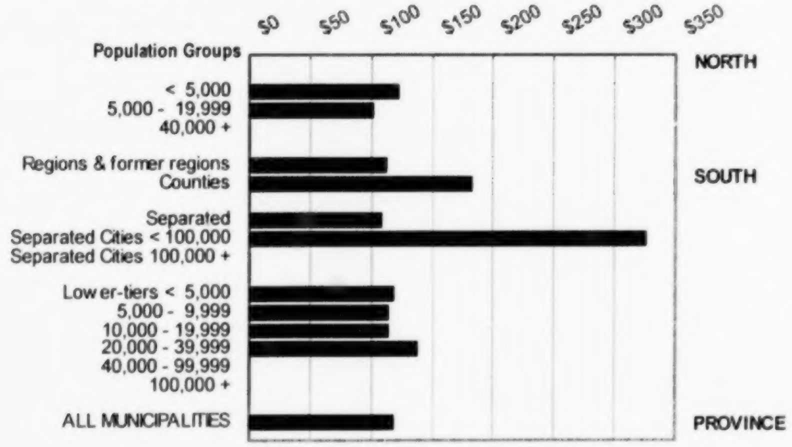
Average operating costs for solid waste diversion (collection, disposal, diversion) per household

Population	Reporting #	Range #	2002 Median #	2001 Median #
NORTH				
< 5,000	31	44 to 447	123	124
5,000 – 19,999	5	89 to 158	102	109
40,000 +				
SOUTH				
Regions & Former Regions	2	113 to 132	113	126
Counties	1	182	182	200
Single-tiers				
Separated Towns/Twp	2	109 to 177	109	162
Separated Cities < 100,000	1	326	326	118
Separated Cities 100,000 +				
Lower-tiers				
< 5,000	24	68 to 358	119	116
5,000 – 9,999	30	48 to 240	114	122
10,000 – 19,999	11	74 to 176	115	117
20,000 – 39,999	1	138	138	
40,000 – 99,999				
100,000 +				
ALL MUNICIPALITIES	108	44 to 447	119	121

FIR reference: SLC 91 3603 13. In 2002, 108 municipalities reported the measure subject to conditions, and in 2001, 84 municipalities reported the measure.

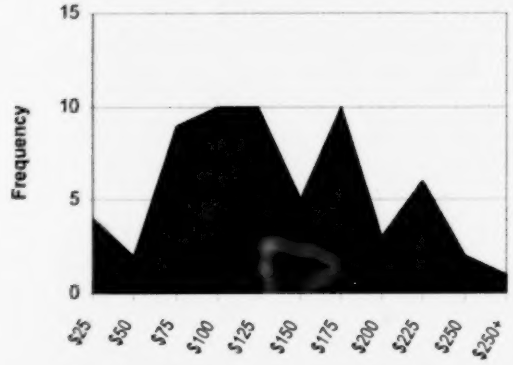
Condition: The value in the denominator in SLC 91 3502 11 equals households in SLC 90 0010 or SLC 90 0010 02. The type of units was not set as a condition because 118 municipalities did not indicate the type of units used.

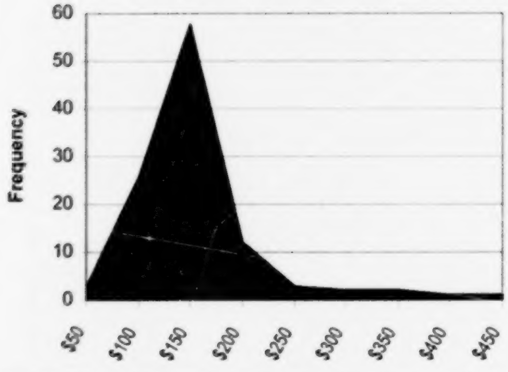
Average Operating Costs for Solid Waste Management (Collection, Disposal, Diversion) per Household, 2002 (Median)



Solid Waste: Efficiency

Average operating costs for solid waste management per tonne or per household.


Average Operating Costs for Solid Waste Management per Tonne, All Municipalities (2002)


Average Operating Costs for Solid Waste Management per Household All Municipalities (2002)

Objective Efficient solid waste management.

Notes The factors affecting this measure will include all the factors affecting the individual measures.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. In 2002, municipalities reporting the integrated measure could also report the individual measures for garbage collection, garbage disposal and solid waste diversion.

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a "tonne" is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

Factors affecting results

Results are influenced by:

- Rural/urban mix.
- Mix of residential, industrial, commercial and institutional waste.
- Urban form: distance between pick-up points and amount collected at each point.
- Presence of competitive market forces.
- Reliance on private contractors.

Collection is influenced by:

- Level of garbage collection service, including percentage of residents receiving service, industrial.commerical/institutional clients/ frequency of pick-up.
- Haulage distance to landfill sites and transfer stations.
- Special collection services, e.g. on-call collection of bulky and white goods offered.
- Bag or container limits. Ban of leaf/yard waste and recyclables from waste collection.

Disposal results are influenced by:

- Disposal method: landfill, incineration, composting, export, etc.
- Number of landfill sites.
- Landfill hours of operation.
- Retroactive recognition of landfill closure and post-closure costs.
- Cost of perpetual care of landfill sites.
- Recycling programs and solid waste diversion rate.

Diversion results are influenced by:

- Scope of diversion program and materials diverted.
- Solid waste diversion rate, including level of public participation.
- Pick-up services and frequency of pick-up.
- Promotional and education budget.
- Levels of public participation.

- Haulage distance to processing and markets.
- Prices received for recyclable material.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Precipitation which impacts the weight of materials collected.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Solid Waste Management: Effectiveness

Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.

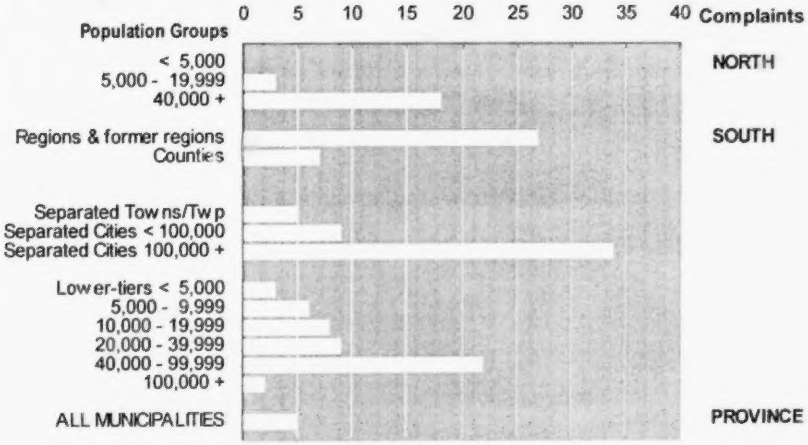
$$\frac{\text{Number of complaints received in a year concerning the collection of garbage and recycled materials}}{\text{Total households / 1,000}}$$

Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households

			2002	2001
Population	Reporting #	Range #	Median #	Median #
NORTH				
< 5,000	92	0 to 210	0	2
5,000 – 19,999	11	0.3 to 35	3	3
40,000 +	3	7 to 26	18	14
SOUTH				
Regions & Former Regions	11	2 to 66	27	24
Counties	5	0 to 20	7	11
Single-tiers				
Separated Towns/Twp	3	4 to 19	5	4
Separated Cities < 100,000	16	1 to 104	9	10
Separated Cities 100,000 +	4	31 to 58	34	33
Lower-tiers				
< 5,000	47	0 to 322	3	2
5,000 – 9,999	45	0 to 417	6	6
10,000 – 19,999	33	0 to 90	8	12
20,000 – 39,999	9	0 to 350	9	7
40,000 – 99,999	6	0 to 251	22	19
100,000 +	5	0 to 29	2	8
ALL MUNICIPALITIES	290	0 to 417	5	6

FIR reference: SLC 92 3452 07 .
In 2002, 290 municipalities reported the measure, and in 2001, 286 municipalities reported the measure.

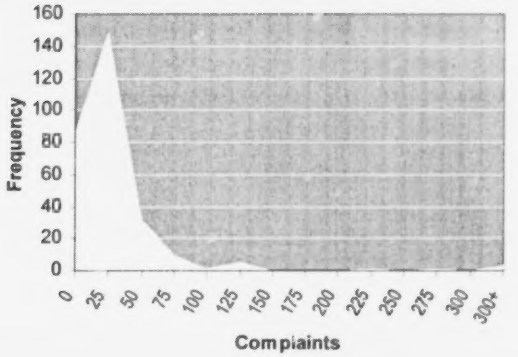
Number of Complaints Received in a Year Concerning the Collection of Garbage and Recycled Materials per 1,000 Households, 2002 (Median)



Solid Waste Management: Effectiveness

Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.

Number of Complaints Received in a Year Concerning the Collection of Garbage and Recycled Materials per 1,000 Households, All Municipalities (2002)



Objectives Municipal solid waste services do not have an adverse effect on environment.

Notes Municipalities differ in the formality of tracking systems and the definition of complaints.

Complaints should not include public inquiries about service or comments on local government policy. Some municipalities identified types of complaints including missed waste, non-collected waste, messy dumpsters, snowbank issues. One municipality defined complaints as anything that required investigation and/or resolution by municipal staff.

The measure refers to total households in the municipality divided by 1,000 not just households receiving collection service.

Factors affecting results Results are influenced by:

- Whether complaints are formally tracked or estimated.
- Whether system includes both phone and written complaints.
- Whether complaints are tracked separately from public inquiries.
- Whether municipality provides collection services or uses depot recycling only.
- Change in contractor or change in collection method.

Solid Waste Management:
Total number of solid waste management sites owned by municipality with a Ministry of Environment (MOE) Certificate of Approval.

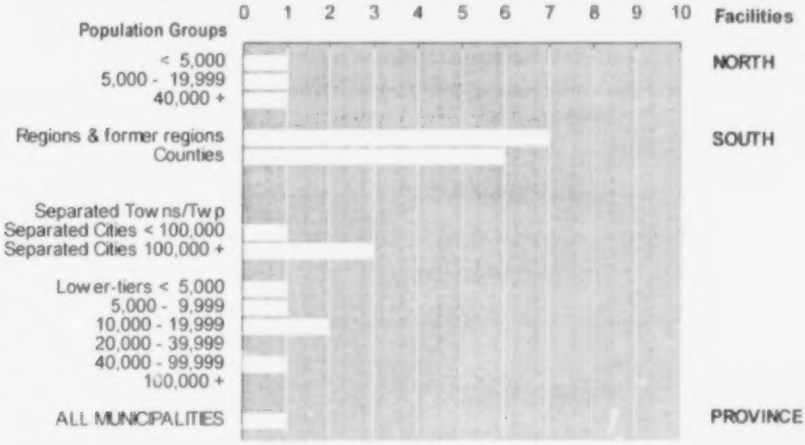
Total number of solid waste management sites owned by municipality with a Ministry of Environment Certificate of Approval

			2002	2001
Population	Reporting \#	Range \#	Median \#	Median \#
NORTH				
< 5,000	86	0 to 9	1	1
5,000 – 19,999	12	0 to 4	1	1
40,000 +	3	1 to 2	1	1
SOUTH				
Regions & Former Regions	12	1 to 24	7	7
Counties	6	1 to 41	6	0
Single-tiers				
Separated Towns/Twp	3	0 to 1	0	0
Separated Cities < 100,000	15	0 to 42	1	1
Separated Cities 100,000 +	4	2 to 10	3	4
Lower-tiers				
< 5,000	46	0 to 9	1	1
5,000 – 9,999	39	0 to 5	1	1
10,000 – 19,999	28	0 to 9	2	0
20,000 – 39,999	3	0 to 2	0	0
40,000 – 99,999	1	1	1	0
100,000 +	5	0 to 4	0	0
ALL MUNICIPALITIES	263	0 to 42	1	1

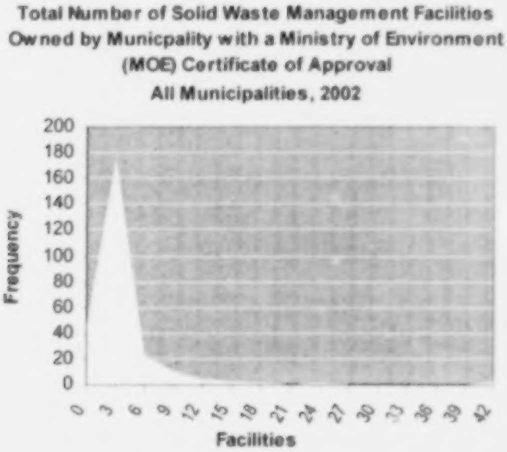
FIR reference: SLC 92 3552 07.
In 2002, 263 municipalities reported the measure, and in 2001, 408 municipalities reported the measure.

NOTES: In 2001, the measure was defined as the total number of solid waste management sites owned by municipality. In 2002, the measure was re-defined as the total number of solid waste management sited owned by the municipality with a Ministry of Environment (MOE) Certificate of Approval.

Number of Solid Waste Management Facilities Owned by Municpality with a Ministry of Environment (MOE) Certificate of Approval, 2002 (Median)



Solid Waste Management:
Total number of solid waste management sites owned by municipality with a Ministry of Environment (MOE) Certificate of Approval.


Total Number of Solid Waste Management Facilities Owned by Municipality with a Ministry of Environment (MOE) Certificate of Approval All Municipalities, 2002

Objective

Municipal solid waste services do not have an adverse effect on environment.

Notes

This measure applies only to solid waste management facilities owned by the municipality. The measure includes open or closed landfill sites.

In 2001, the measure was defined as Total number of solid waste management sites owned by municipality. In 2002, the measure was redefined as the Total number of solid waste management faciities owned by municipality with a Ministry of Environment (MOE) Certificate of Approval. Fewer facilities have an MOE Certificate of Approval with the result that fewer municipalities reported the measure in 2002.

Of those municipalities reporting this measure, 46 reported no municipally owned solid waste management sites.

This measure provides a context to the number of sites and number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect.

Solid Waste Diversion: Effectiveness
Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by facility.

Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by facility.

							2002
Population	Reporting #	Range # of Days	1 to 30 Days # of Mun	31 to 100 Days # of Mun	101 to 199 Days # of Mun	201 to 365 Days # of Mun	Total 1 to 365 Days # of Mun
NORTH							
< 5,000	55	0 to 106	2	2	1		5
5,000 – 19,999	6	0					
40,000 +	2	0					
SOUTH							
Regions & Former Regions	7	0					
Counties	2	0					
Single-tiers							
Separated Towns/Twp							
Separated Cities < 100,000	11	0 to 125					
Separated Cities 100,000 +	1	0					
Lower-tiers							
< 5,000	16	0			1		1
5,000 – 9,999	18	0 to 365				2	2
10,000 – 19,999	14	0 to 365	1	1		1	3
20,000 – 39,999							
40,000 – 99,999							
100,000 +	1	0			1		
ALL MUNICIPALITIES, 2002	133	0 to 365	3	3	3	3	12
ALL MUNICIPALITIES, 2001	121	0 to 365	3	2	1	4	10

FIR reference: SLC 92 3553 07 to SLC 92 3560 07. In 2002, 133 municipalities reported the measure, and in 2001, 121 municipalities reported the measure.

Condition: Number of days was not null in any line between 3553 and 3560.

Solid Waste Diversion: Effectiveness

Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by site.

Objectives	Municipal solid waste services do not have an adverse effect on environment.
Notes	This measure applies only to solid waste management facilities owned by the municipality which have a Ministry of Environment (MOE) Certificate of Approval and a compliance order for remediation concerning an air or groundwater standard.

Solid Waste Diversion: Effectiveness

Percentage of residential solid waste diverted.

$$\frac{\text{Total tonnes of residential solid waste diverted}}{\text{Total tonnes of residential solid waste disposed of and total tonnes diverted}} \quad \text{X 100}$$

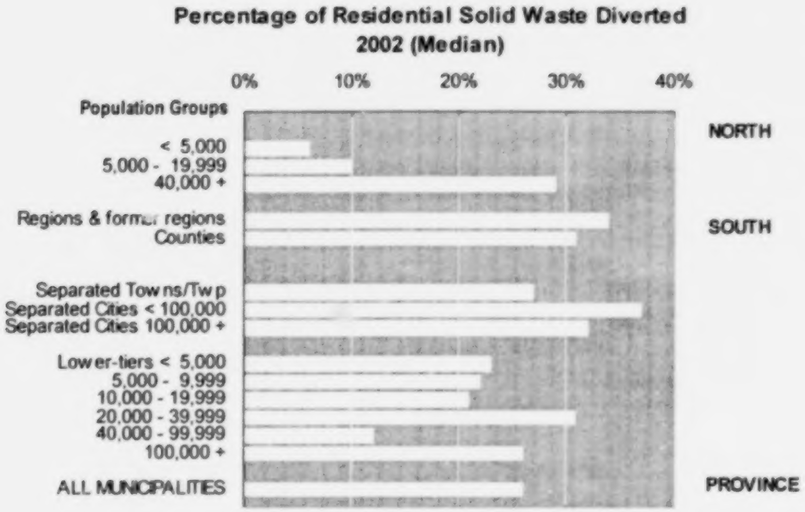
Percentage of residential solid waste diverted

			2002	2001
Population	Reporting #	Range #	Median #	Median #
NORTH				
< 5,000	26	0% to 50%	6%	3%
5,000 – 19,999	5	0% to 24%	10%	5%
40,000 +	2	30% to 31%	29%	29%
SOUTH				
Regions & Former Regions	10	20% to 45%	34%	32%
Counties	4	29% to 57%	31%	29%
Single-tiers				
Separated Towns/Twp	1	26% to 27%	27%	24%
Separated Cities < 100,000	11	13% to 46%	37%	38%
Separated Cities 100,000 +	4	31% to 42%	32%	33%
Lower-tiers				
< 5,000	16	9% to 69%	23%	17%
5,000 – 9,999	24	6% to 46%	22%	28%
10,000 – 19,999	15	6% to 57%	21%	20%
20,000 – 39,999	3	25% to 32%	31%	27%
40,000 – 99,999	5	7% to 35%	12%	13%
100,000 +	3	14% to 35%	26%	10%
ALL MUNICIPALITIES	129	0% to 69%	26%	28%

FIR reference: SLC 92 3655 07. In 2002, 129 municipalities reported subject to conditions; in 2001, 105 reported.

Conditions:

- Percentage of solid waste diverted is less than 100%.
- If both effectiveness measures for diversion were reported, residential tonnage diverted was compared to total tonnage diverted from all property classes. To be included, total tonnes of solid waste diverted from all property classes must be greater than total tonnes of residential solid waste diverted. (SLC 92 3656 05 > SLC 92 3655 05)
- Total tonnes of residential solid waste disposed of and total tonnes diverted in the denominator of this measure were compared to the denominator of the efficiency measure for solid waste management. To be included, total tonnes of residential solid waste disposed of and total tonnes diverted must be less that total tonnes disposed of and diverted from all property classes, if the municipality selecied tonnes for the denominator of the efficiency measure. (SLC 92 3655 06 < SLC 91 3603 11 or units in SLC 91 3603 14 are not tonnes)


Percentage of Residential Solid Waste Diverted
2002 (Median)
0%
10%
20%
30%
40%
Population Groups
< 5,000
5,000 - 19,999
40,000 +
Regions & former regions
Counties
Separated Towns/Twp
Separated Cities < 100,000
Separated Cities 100,000 +
Lower-tiers < 5,000
5,000 - 9,999
10,000 - 19,999
20,000 - 39,999
40,000 - 99,999
100,000 +
ALL MUNICIPALITIES
NORTH
SOUTH
PROVINCE

Solid Waste Diversion: Effectiveness

Percentage of residential solid waste diverted (based on combined residential & ICI tonnage).

$$\frac{\text{Total tonnes of solid waste diverted from all property classes}}{\text{Total tonnes of solid waste disposed of and total tonnes diverted from all property classes}} \times 100$$

Percentage of residential solid waste diverted (based on combined residential and ICI tonnage)

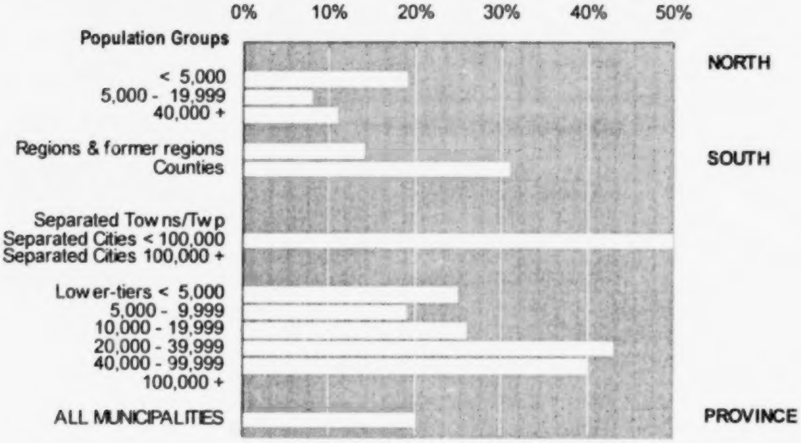
			2002	2001
Population	Reporting #	Range #	Median #	Median #
NORTH				
< 5,000	10	4% to 41%	19%	17%
5,000 – 19,999	5	1% to 32%	8%	13%
40,000 +	1	11%	11%	29%
SOUTH				
Regions & Former Regions	2	14% to 17%	14%	13%
Counties	1	31%	31%	
Single-tiers				
Separated Towns/Twp				
Separated Cities < 100,000	3	11% to 53%	50%	49%
Separated Cities 100,000 +				
Lower-tiers				
< 5,000	16	8% to 49%	25%	19%
5,000 – 9,999	16	0% to 67%	19%	17%
10,000 – 19,999	7	8% to 51%	26%	21%
20,000 – 39,999	1	43%	43%	25%
40,000 – 99,999	1	40%	40%	33%
100,000 +				
ALL MUNICIPALITIES	63	0% to 67%	20%	20%

FIR reference: SLC 92 3656 07. In 2002, 63 municipalities reported subject to conditions, and in 2001, 61 reported.

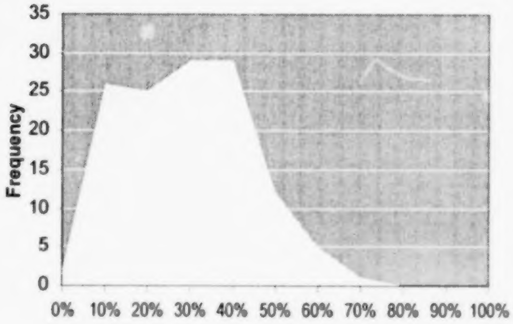
Conditions:

- Percentage of solid waste diverted is less than 100%.
- If both effectiveness measures for diversion were reported, residential tonnage diverted was compared to total tonnage diverted from all property classes. To be included, total tonnes of solid waste diverted from all property classes must be greater than total tonnes of residential solid waste diverted. (SLC 92 3656 05 > SLC 92 3655 05)
- Total tonnes of solid waste disposed of and total tonnes diverted from all property classes in the denominator of this measure were compared to the denominator of the efficiency measure for solid waste management. To be included, total tonnes of solid waste disposed of and total tonnes diverted from all property classes must be identical in both the efficiency and effectiveness measures, if the municipality selected tonnes for the denominator of the efficiency measure. (SLC 91 3603 11 = SLC 92 3656 06 or units in SLC 91 3604 14 are not tonnes.)
- A municipality was excluded because it indicated in the Notes that it was reporting cubic metres instead of tonnes.

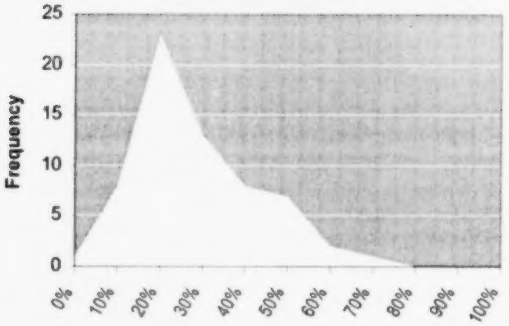
Percentage of Residential Solid Waste Diverted (Based on Combined Residential and ICI Tonnage), 2002 (Median)



Solid Waste Diversion: Effectiveness
Percentage of residential solid waste diverted.
Percentage of residential solid waste diverted (based on combined residential and ICI tonnage).



Percentage of Residential Solid Waste Diverted
All Municipalities (2002)



Percentage of Residential Solid Waste Diverted
(Based on Combined Residential & ICI Tonnage)
All Municipalities (2002)

Objectives Municipal waste reduction programs divert waste from landfills and/or incinerators.

Notes Municipalities were to complete only one effectiveness measure for solid waste diversion. If the municipality records residential tonnage separately it should report the measure: percentage of residential solid waste diverted. If the municipality does not record tonnage for residential solid waste separately from industrial, commercial, institutional (ICI) tonnage, it should report the measure: percentage of residential solid waste diverted (based on combined residential and ICI tonnage).

Many municipalities completed both measures, reporting the same results for each measure. It did not appear that municipalities were distinguishing residential tonnage from tonnage for all property classes. Therefore, a condition was set comparing residential tonnage diverted to tonnage diverted from all property classes. Municipalities were not included if the tonnage was identical.

In analysing results, tonnes disposed of and diverted in the denominator of each of these measures was compared with the denominator of the efficiency measure, total tonnes disposed of and total tonnes diverted from all property classes.

Factors affecting results

Results are influenced by:

- Whether the calculation of waste diversion is based on Generally Accepted Principles (GAP) developed by Corporations Supporting Recycling (CSR).
- Whether diverted waste is tracked by class.
- Whether scales are available at landfill sites and waste transfer facilities.
- Whether data is available for solid waste received at private waste transfer facilities.
- Whether residential tonnage for both disposal and diversion is weighed or estimated. (Some municipalities weigh the tonnage diverted, but estimate tonnage disposed of.)
- Number of materials included in recycling program (e.g. plastic, metal, glass, paper, hazardous waste, white goods, food waste).
- Method of collection, e.g. drop-off depots, recycling pick-up.
- Percentage of population receiving pick-up service.
- Frequency of pick-up service.
- Effort spent on promotion.
- Increase in plastic materials affects volume, with a smaller impact on weight.

Location of New Development:

Percentage of new development with final approval which is located within settlement areas.

Number of new lots, blocks and/or units with final approval which are located within settlement areas
/
Total number of new lots, blocks and/or new units with final approval which are located within the entire municipality
X 100

Percentage of new development with final approval which is located within settlement areas

			2002	2001
Population	Reporting #	Range %	Median %	Median %
NORTH				
< 5,000	44	0% to 100%	0%	9%
5,000 – 19,999	9	0% to 100%	100%	100%
40,000 +	3	90% to 100%	100%	94%
SOUTH				
Regions & Former Regions	10	53% to 100%	99%	99%
Counties	13	0% to 95%	63%	36%
Single-tiers				
Separated Towns/Twp				0%
Separated Cities < 100,000	12	18% to 100%	100%	100%
Separated Cities 100,000 +	4	89% to 100%	91%	90%
Lower-tiers				
< 5,000	34	0% to 100%	3%	17%
5,000 – 9,999	55	0% to 100%	43%	17%
10,000 – 19,999	43	0% to 100%	86%	90%
20,000 – 39,999	11	0% to 100%	97%	98%
40,000 – 99,999	11	90% to 100%	100%	100%
100,000 +	11	100%	100%	100%
ALL MUNICIPALITIES	260	0% to 100%	78%	80%

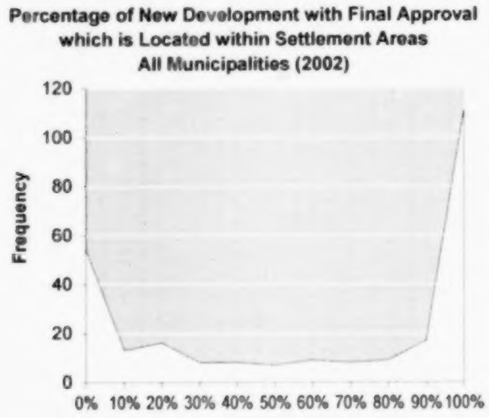
FIR reference: SLC 92 8154 07. Measure was reported by 260 municipalities in 2002 and 255 municipalities in 2001.

Condition: The total number of new lots, blocks and/or units with final approval which are located within the entire municipality is greater than zero (SLC 92 8154 06 > 0).

Percentage of New Lots, Blocks and/or Units with Final Approval which are Located within Settlement Areas, 2002 (Median)

Location of New Development: Effectiveness

Percentage of new development with final approval which is located within settlement areas.



Objective New lot creation is occurring in settlement areas.

Notes A municipality does not complete this measure if it did not approve any lots, blocks or units in 2002.

Factors affecting results Results are influenced by:

- Whether the municipality has an official plan.
- Whether the municipality has designated settlement areas.
- Availability of land for new development.
- Crown Land. For some municipalities, Crown Land may represent a significant proportion of land.
- Development outside of settlement areas may be in compliance with official plan policies and Provincial Policy Statements.

Preservation of Agricultural Land: Effectiveness

Percentage of land designated for agricultural purposes which was preserved during the 2002 reporting year.

$$\frac{\text{Hectares of land designated for agricultural purposes in the Official Plan as of December } 31^{st} \text{ of reporting year}}{\text{Hectares of land designated for agricultural purposes in the Official Plan as of January 1 of the reporting year}}$$

Percentage of land designated for agricultural purposes which was preserved during the 2002 reporting year

			2002	2001
Population	Reporting \#	Range %	Median %	Median %
NORTH				
< 5,000	19	100%	100%	100%
5,000 – 19,999	4	96% to 100%	100%	100%
40,000 +	1	100%	100%	100%
SOUTH				
Regions & Former Regions	9	99% to 100%	100%	100%
Counties	9	100%	100%	100%
Single-tiers				
Separated Towns/Twp	1	100%	100%	96%
Separated Cities < 100,000	9	100%	100%	100%
Separated Cities 100,000 +	3	100%	100%	100%
Lower-tiers				
< 5,000	27	100%	100%	100%
5,000 – 9,999	45	77% to 100%	100%	100%
10,000 – 19,999	43	100%	100%	100%
20,000 – 39,999	11	100%	100%	100%
40,000 – 99,999	10	97% to 100%	100%	100%
100,000 +	9	0% to 100%	100%	100%
ALL MUNICIPALITIES	200	0% to 100%	100%	100%

FIR reference: SLC 92 8163 07.
The measure was reported by 200 municipalities in 2002 and 185 municipalities in 2001.

Conditions:

- Hectares of land designated for agricultural purposes as of January 1st of the reporting year are greater than zero (SLC 92 8163 06 > 0).
- Measure is less than 101% (SLC 92 8164 07 < 101%).
- A municipality was excluded in 2001, because it reported acres, rather than hectares.

No bar graph is included because the median result for all groups was 100% in 2002.

Preservation of Agricultural Land:

Percentage of land designated for agricultural purposes which was preserved during the reporting year relative to the base year of 2000.

$$\frac{\text{Hectares of land designated for agricultural purposes in the Official Plan as of December 31 of reporting year}}{\text{Hectares of land designated for agricultural purposes in the Official Plan as of January 1, 2000}}$$

Percentage of land designated for agricultural purposes which was preserved during the reporting year relative to the base year of 2000.

			2002	2001
Population	Reporting #	Range %	Median %	Median %
NORTH				
< 5,000	19	99 to 100	100%	100%
5,000 – 19,999	4	96 to 100	100%	100%
40,000 +	1	100	100%	100%
SOUTH				
Regions & Former Regions	9	98 to 100	99%	100%
Counties	9	100	100%	100%
Single-tiers				
Separated Towns/Twp	1	96	96%	96%
Separated Cities < 100,000	8	75 to 100	100%	100%
Separated Cities 100,000 +	3	99 to 100	100%	100%
Lower-tiers				
< 5,000	26	62 to 100	100%	100%
5,000 – 9,999	44	77 to 100	100%	100%
10,000 – 19,999	41	31 to 100	100%	100%
20,000 – 39,999	11	100	100%	100%
40,000 – 99,999	9	97 to 100	100%	100%
100,000 +	9	0 to 100	100%	100%
ALL MUNICIPALITIES	194	0 to 100	100%	100%

FIR reference: SLC 92 8164 07.
The measure was reported by 194 municipalities in 2002 and 180 municipalities in 2001.

Conditions:

- Hectares of land designated for agricultural purposes as of January 1st are greater than 0 (SLC 92 8164 06 > 0).
- Measure is less than 101% (SLC 92 8164 07 < 101%).
- A municipality was excluded in 2001, because it reported acres, rather than hectares.

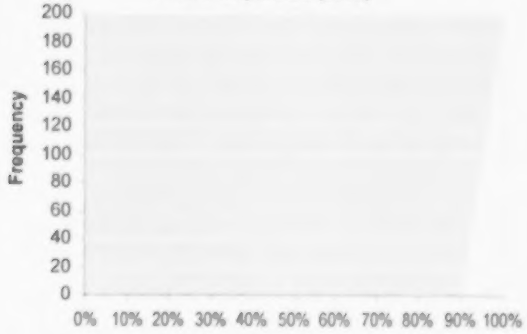
No bar graph is included because the median result for all but two groups was 100% in 2002.

Preservation of Agricultural Land:

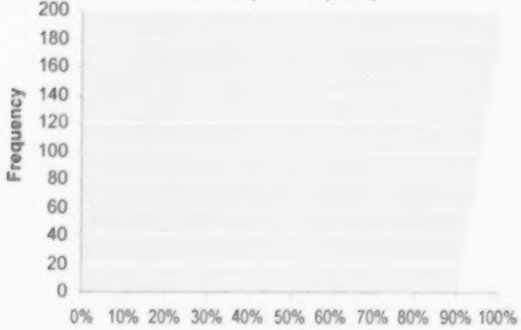
Percentage of land designated for agricultural purposes which was preserved during the 2002 reporting year.

Percentage of land designated for agricultural purposes which was preserved relative to the base year of 2000.

Percentage of Land Designated for Agricultural Purposes which was not Re-designated for Other Uses During the Reporting Year
All Municipalities (2002)



Percentage of Land Designated for Agricultural Purposes which was not Re-designated for Other Uses During 2002 Relative to the Base Year of 2000
All Municipalities (2002)



Objective Preservation of agricultural land.

Factors affecting results Results are influenced by:

- Whether there is an official plan.
- Changes to Official Plan or adoption of new Official Plan.
- Whether a municipality designates agricultural land as a separate class in the Official Plan.
- Whether agricultural land is interpreted as land bearing any designation intended to preserve agricultural land.
- Whether a municipality has an inventory of agricultural land.
- Annexation, amalgamation.
- Demand for new development.
- Building of new roads and widening of roads.
- Geographic Information System (GIS) data leads to changes in the number of hectares.

Preservation of Agricultural Land:

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during the reporting year.

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during the reporting year

			2002	2001
Population	Reporting \#	Range \#	Median \#	Median \#
NORTH				
< 5,000	19	0	0	0
5,000 – 19,999	4	0 to 92	0	0
40,000 +	1	0	0	0
SOUTH				
Regions & Former Regions	8	0 to 357	0	6
Counties	9	0 to 65	3	0
Single-tiers				
Separated Towns/Twp	1	0	0	8
Separated Cities < 100,000	8	0 to 50	0	4
Separated Cities 100,000 +	3	0 to 10	0	15
Lower-tiers				
< 5,000	27	0 to 1	0	0
5,000 – 9,999	45	0 to 3,213	0	0
10,000 – 19,999	40	0 to 181	0	0
20,000 – 39,999	9	0	0	0
40,000 – 99,999	10	0 to 302	0	0
100,000 +	9	0 to 3,100	0	0
ALL MUNICIPALITIES	193	0 to 3,213	0	0

FIR reference: SLC 92 8165 07.
The measure was reported by 193 municipalities in 2002 and 184 municipalities in 2001.

Conditions:

- In the related measure for the preservation of agricultural land during the reporting year, the municipality designates some land in the Official Plan for agricultural purposes (SLC 92 8163 06 > 0).
- Also, that measure was not greater than 100%. (SLC 92 8163 07 < 101%)
- Municipalities reporting negative values for the number of hectares were not included in the summary statistics. (SLC 92 8165 07 ≥ 0. Negative values for the number of hectares re-designated may be the result of changes in the Official Plan, changes in the method of calculation of hectares, or data entry errors.
- A municipality was excluded in 2001, because it reported acres, rather than hectares.

No bar graph is included because the median result for all but one group was 0 in 2002.

Preservation of Agricultural Land: Effectiveness

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.

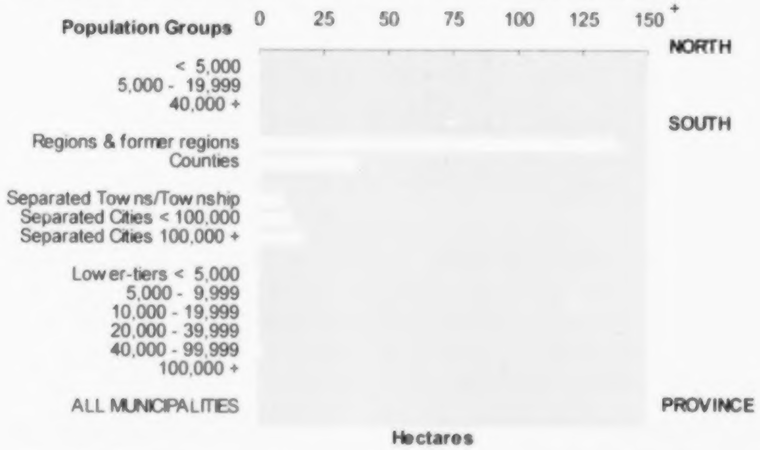
Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000

			2002	2001
Population	Reporting #	Range #	Median #	Median #
NORTH				
< 5,000	19	0 to 12	0	0
5,000 – 19,999	4	0 to 92	0	0
40,000 +	1	0	0	0
SOUTH				
Regions & Former Regions	9	0 to 1,037	139	88
Counties	8	0 to 186	38	0
Single-tiers				
Separated Towns/Twp	1	9	9	8
Separated Cities < 100,000	7	0 to 2,528	13	1
Separated Cities 100,000 +	3	0 to 25	18	15
Lower-tiers				
< 5,000	25	0 to 1,737	0	0
5,000 – 9,999	44	0 to 3,214	0	0
10,000 – 19,999	38	0 to 225	0	0
20,000 – 39,999	9	0 to 88	0	0
40,000 – 99,999	9	0 to 302	1	0
100,000 +	9	0 to 3,100	0	0
ALL MUNICIPALITIES	186	0 to 3,214	0	0

FIR reference: SLC 92 8166 07. The measure was reported by 186 municipalities in 2002 and 180 in 2001.

- In the related measure for the preservation of agricultural land relative to 2000 year, the municipality designates some land in the Official Plan for agricultural purposes (SLC 92 8164 06 > 0).
- Also, that measure was not greater than 100%. (SLC 92 8164 07 < 101%)
- Municipalities reporting negative values for the number of hectares were not included in the summary statistics. (SLC 92 8166 07 ≥ 0. Negative values for the number of hectares re-designated may be the result of changes in the Official Plan, changes in the method of calculation of hectares, or data entry errors.
- A municipality was excluded in 2001, because it reported acres, rather than hectares.

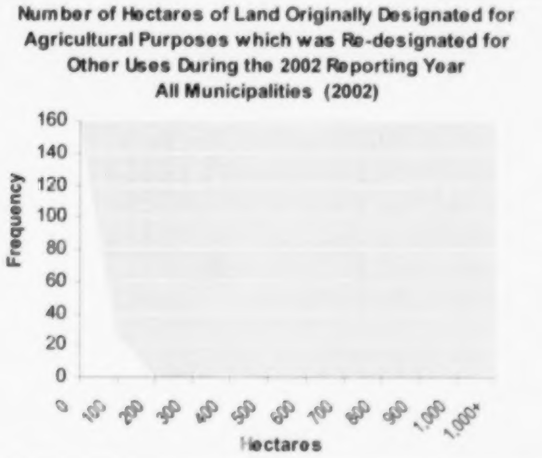
Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000 (2002, Median)

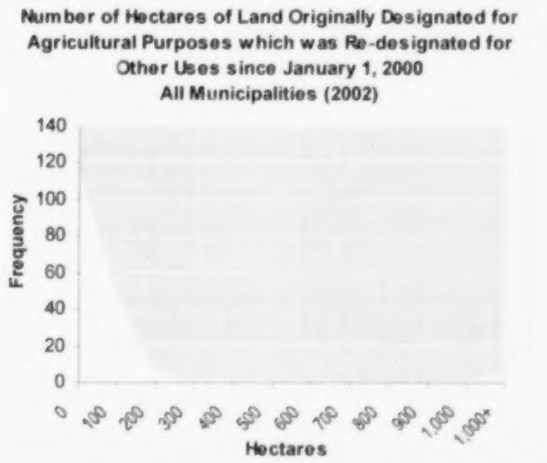


Preservation of Agricultural Land: Effectiveness

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during 2002.

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.


Number of Hectares of Land Originally Designated for Agricultural Purposes which was Re-designated for Other Uses During the 2002 Reporting Year
All Municipalities (2002)


Number of Hectares of Land Originally Designated for Agricultural Purposes which was Re-designated for Other Uses since January 1, 2000
All Municipalities (2002)

Objective Preservation of agricultural land.

Notes This measure provides the number of hectares that were re-designated and supplements the measure for the preservation of agricultural land. The factors affecting the measure are identical to the preservation measure.

2002 Ontario Municipal Performance Measures

Service	Type of measure	Description of Measure	Schedule, line, column in 2002 Financial Information Return
General government			
	efficiency	Operating costs for governance and corporate management as a percentage of total municipal operating costs.	91 0203 13
Protection Services			
Fire services	efficiency	Operating costs for fire services per $1,000 of property assessment.	91 1101 13
Police services	efficiency	Operating costs for police services per household.	91 1202 13
	effectiveness	Violent crime rate per 1,000 persons.	92 1258 07
	effectiveness	Property crime rate per 1,000 persons.	92 1259 07
	effectiveness	Total crime rate per 1,000 persons (Criminal Code offences, excluding traffic).	92 1263 07
	effectiveness	Number of youths charged per 1,000 youths	92 1264 07
Roadways			
Roads	efficiency	Operating costs for paved (hard top) roads per lane kilometre.	91 2105 13
	efficiency	Operating costs for unpaved (loose top) roads per lane kilometre.	91 2106 13
	effectiveness	Percentage of paved lane kilometres where the condition is rated as good to very good.	92 2152 07
Winter control	efficiency	Operating costs for winter control maintenance of roadways per lane kilometre.	91 2203 13
	effectiveness	Percentage of winter events where the response met or exceeded municipal road maintenance standards.	92 2251 07
Conventional Transit			
	efficiency	Operating costs for conventional transit per regular service passenger trip.	91 2301 13
	effectiveness	Number of conventional transit passenger trips per person in the service area in a year.	92 2351 07
Environmental Services			
Wastewater	efficiency	Operating costs for the collection of wastewater per kilometre of wastewater main.	91 3103 13
	efficiency	Operating costs for the treatment and disposal of wastewater per megalitre.	91 3104 13
	efficiency	Operating costs for the collection, treatment and disposal of wastewater per megalitre (Integrated System).	91 3105 13
	effectiveness	Number of wastewater main backups per 100 kilometres of wastewater main in a year.	92 3154 07
	effectiveness	Percentage of wastewater estimated to have by-passed treatment.	92 3155 07

2002 Ontario Municipal Performance Measures

Service	Type of measure	Description of Measure	Schedule, line, column in 2002 Financial Information Return
Environmental Services			
Storm water	efficiency	Operating costs for urban storm water management (collection, treatment, disposal) per kilometre of drainage system.	91 3201 13
	efficiency	Operating costs for rural storm water management (collection, treatment, disposal) per kilometre of drainage system.	91 3202 13
Drinking water	efficiency	Operating costs for the treatment of drinking water per megalitre.	91 3303 13
	efficiency	Operating costs for the distribution of drinking water per kilometre of water distribution pipe.	91 3304 13
	efficiency	Operating costs for the treatment and distribution of drinking water per megalitre (Integrated System).	91 3305 13
	effectiveness	Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.	92 3355 07
	effectiveness	Number of water main breaks per 100 kilometres of water distribution pipe in a year.	92 3356 07
Solid waste	efficiency	Operating costs for garbage collection per tonne or per household.	91 3402 13
	efficiency	Operating costs for garbage disposal per tonne or per household.	91 3502 13
	efficiency	Operating costs for solid waste diversion (recycling) per tonne or per household.	91 3602 13
	efficiency	Average operating costs for solid waste management (collection, disposal and diversion) per tonne or per household.	91 3603 13
	effectiveness	Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.	92 3452 07
	effectiveness	Total number of solid waste management sites owned by municipality with a Ministry of Environment Certificate of Approval	92 3552 07
	effectiveness	Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a municipally owned solid waste management facility, by facility.	92 3553 03 to 92 3560 03 92 3553 07 to 92 3560 07
	effectiveness	Percentage of residential solid waste diverted for recycling.	92 3655 07
	effectiveness	Percentage of residential solid waste diverted for recycling (based on combined residential and ICI tonnage).	92 3656 07

2002 Ontario Municipal Performance Measures

Service	Type of measure	Description of Measure	Schedule, line, column in 2002 Financial Information Return
Land Use Planning			
	effectiveness	Percentage of new lots, blocks and/or units with final approval which are located within settlement areas.	92 8154 07
	effectiveness	Percentage of land designated for agricultural purposes which was not re-designated for other uses during 2002.	92 8163 07
	effectiveness	Percentage of land designated for agricultural purposes which was not re-designated for other uses relative to the base year of 2000.	92 8164 07
	effectiveness	Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during 2002.	92 8165 07
	effectiveness	Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.	92 8166 07

MUNICIPALITIES BY GROUP

Municipalities are grouped by geography, municipal type and 2002 enumerated population in the tables and bar graphs.

NORTH

Population	Municipality	2002 Enumerated population
< 5,000	Alberton Tp	902
	Armour Tp	1,239
	Armstrong Tp	1,345
	Assiginack Tp	803
	Atikokan Tp	3,400
	Baldwin Tp	592
	Barrie Island Tp	47
	Billings Tp	508
	Black River - Matheson Tp	2,918
	Blind River T	3,400
	Bonfield Tp	2,119
	Brethour Tp	157
	Bruce Mines T	590
	Burk's Falls V	862
	Burpee and Mills Tp	331
	Callander M	3,052
	Calvin Tp	622
	Carling Tp	1,031
	Casey Tp	396
	Central Manitoulin Tp	1,775
	Chamberlain Tp	342
	Chapleau Tp	2,671
	Chapple Tp	854
	Charlton T	287
	Chisholm Tp	1,189
	Cobalt T	1,218
	Cockburn Island Tp	3
	Coleman Tp	518
	Conmee Tp	721
	Dack Tp	427
	Dawson Tp	593
	Dorion Tp	417
	Dubreuilville Tp	821
	Dymond Tp	1,226
	Ear Falls Tp	1,054
	East Ferris Tp	4,315
	Emo Tp	1,173
	Englehart T	1,570
	Evanturel Tp	503
	Fauquier-Strickland Tp	679
	French River M	2,856

NORTH

Population	Municipality	2002 Enumerated population
< 5,000	Gauthier Tp	132
	Gillies Tp	497
	Gordon Tp	444
	Gore Bay T	842
	Haileybury T	4,468
	Harley Tp	603
	Harris Tp	519
	Hilliard Tp	219
	Hilton Beach V	196
	Hilton Tp	246
	Hornepayne Tp	1,265
	Hudson Tp	468
	Huron Shores M	1,684
	Ignace Tp	1,494
	James Tp	467
	Jocelyn Tp	278
	Johnson Tp	619
	Joly Tp	272
	Kearney T	725
	Kerns Tp	373
	Killarney M	460
	La Vallee Tp	1,040
	Laird Tp	990
	Lake of The Woods Tp	377
	Larder Lake Tp	867
	Latchford T	298
	Macdonald Meredith et al Tp	1,407
	Machar Tp	788
	Machin Tp	1,030
	Magnetawan M	1,184
	Manitouwadge Tp	2,856
	Marathon T	4,314
	Markstay-Warren M	2,843
	Matachewan Tp	364
	Mattawa T	2,251
	Mattawan Tp	101
	Mattice - Val Cote Tp	869
	McDougall Tp	2,523
	McGarry Tp	843
	McKellar Tp	867
	McMurrich-Monteith Tp	666
	Michipicoten Tp	3,241
	Moonbeam Tp	1,156
	Moosonee T	1,515
	Morley Tp	490

NORTH

Population	Municipality	2002 Enumerated population
< 5,000	Nairn and Hyman Tp	427
	Neebing M	2,044
	New Liskeard T	4,793
	Nipigon Tp	1,944
	Nipissing Tp	1,484
	Northeastern Manitoulin & The Islands T	2,322
	O'Connor Tp	717
	Opasatika Tp	331
	Papineau-Cameron Tp	914
	Perry Tp	1,907
	Pickle Lake Tp	392
	Plummer Additional Tp	638
	Powassan M	3,169
	Prince Tp	977
	Rainy River T	925
	Red Lake M	3,958
	Red Rock Tp	1,144
	Ryerson Tp	588
	Sables-Spanish Rivers Tp	3,060
	Schreiber Tp	1,445
	Seguin Tp	3,346
	Shedden Tp	747
	Shuniah Tp	2,332
	Sioux Lookout M	4,595
	Sioux Narrows-Nestor Falls Tp	667
	Smooth Rock Falls T	1,782
	South Algonquin Tp	1,237
	South River V	955
	St. Joseph Tp	1,098
	St.-Charles M	1,294
	Strong Tp	1,292
	Sundridge V	900
	Tarbutt and Tarbutt Additional Tp	426
	Tehkummah Tp	342
	Temagami M	915
	Terrace Bay Tp	1,972
	The Archipelago Tp	563
	The North Shore Tp	576
	Thessalon T	1,326
	Thornloe V	111
	Val Rita-Harty Tp	1,023
	White River Tp	835
	Whitestone M	713

NORTH

Population	Municipality	2002 Enumerated population
5,000 to 19,999	Cochrane T	5,457
	Dryden C	7,587
	Elliot Lake C	11,542
	Espanola T	5,187
	Fort Frances T	7,986
	Greenstone M	5,216
	Hearst T	5,468
	Iroquois Falls T	5,307
	Kapuskasing T	9,325
	Kenora C	14,846
	Kirkland Lake T	9,568
	Oliver Paipoonge M	5,899
	Parry Sound T	5,786
	West Nipissing M	13,452
40,000+	North Bay C	53,654
	Sault Ste. Marie C	74,413
	Thunder Bay C	112,488
	Timmins C	44,179

SOUTH

	Municipality	**2002 Enumerated population**
Regions & Former Regions	Durham R	473,544
	Greater Sudbury C	157,456
	Halton R	349,078
	Hamilton C	459,638
	Muskoka D	46,409
	Niagara R	394,400
	Ottawa C	719,543
	Oxford Co	97,510
	Peel R	874,139
	Toronto C	2,162,147
	Waterloo R	417,932
	York R	634,170
Counties	Bruce Co	60,564
	Dufferin Co	44,761
	Elgin Co	45,209
	Essex Co	157,342
	Frontenac Co	21,918
	Grey Co	82,860
	Haliburton Co	14,101
	Hastings Co	35,101
	Huron Co	58,066
	Lambton Co	122,405
	Lanark Co	49,237
	Leeds and Grenville United Co	61,675
	Lennox and Addington Co	35,425
	Middlesex Co	63,827
	Northumberland Co	70,775
	Perth Co	36,450
	Peterborough Co	49,819
	Prescott and Russell United Co	74,045
	Renfrew Co	78,971
	Simcoe Co	232,817
	Stormont, Dundas and Glengarry United Co	61,682
	Wellington Co	73,195

SOUTH

Single-tiers	Municipality	2002 Enumerated population
Separated Towns/ Township	Gananoque ST	4,908
	Pelee Tp	259
	Prescott ST	3,783
	Smiths Falls ST	8,640
	St. Marys ST	6,055
Separated Cities < 100,000	Barrie C	91,022
	Belleville C	42,855
	Brant County C	29,361
	Brantford C	79,463
	Brockville C	19,970
	Cornwall C	44,999
	Guelph C	94,201
	Haldimand County	40,486
	Kawartha Lakes C	65,084
	Norfolk County	55,811
	Orillia C	28,388
	Pembroke C	12,990
	Peterborough C	67,666
	Prince Edward County C	22,752
	Quinte West C	39,950
	St. Thomas C	30,776
	Stratford C	28,257
Separated Cities 100,000+	Chatham-Kent M	103,824
	Kingston C	108,158
	London C	319,877
	Windsor C	202,431

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
<5,000	Addington Highlands Tp	2,112
	Adelaide-Metcalfe Tp	2,995
	Admaston/Bromley Tp	2,793
	Algonquin Highlands Tp	1,836
	Amaranth Tp	3,413
	Asphodel-Norwood Tp	3,692
	Athens Tp	2,805
	Bancroft T	3,571
	Bonnechere Valley Tp	3,383
	Brooke-Alvinston M	2,773
	Brudenell, Lyndoch and Raglan Tp	1,584
	Carlow/Mayo Tp	795
	Casselman V	2,835
	Central Frontenac Tp	4,004
	Centre Hastings M	3,750
	Dawn-Euphemia Tp	2,431
	Deep River T	4,015
	Deseronto T	1,656
	Dutton-Dunwich M	3,539
	Dysart et al Tp	4,671
	East Garafraxa Tp	2,009
	East Hawkesbury Tp	3,329
	East Luther Grand Valley Tp	2,526
	Enniskillen Tp	3,224
	Faraday Tp	1,402
	Front of Yonge Tp	2,442
	Frontenac Islands Tp	1,548
	Galway-Cavendish and Harvey Tp	4,096
	Georgian Bay Tp	2,038
	Greater Madawaska Tp	2,093
	Hastings Highlands M	3,515
	Havelock-Belmont-Methuen Tp	4,178
	Head, Clara and Maria Tp	251
	Highlands East M	2,662
	Horton Tp	2,492
	Howick Tp	3,515
	Killaloe, Hagarty and Richards Tp	2,329
	Lake of Bays Tp	2,606
	Lanark Highlands Tp	4,458
	Laurentian Hills T	2,727
	Limerick Tp	352
	Lucan Biddulph Tp	4,092
	Madawaska Valley Tp	4,236
	Madoc Tp	1,939
	Marmora and Lake M	3,634
	Melancthon Tp	2,427
	Merrickville-Wolford V	2,571

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
<5,000	Minden Hills Tp	4,932
	Montague Tp	3,054
	Morris-Turnberry M	3,439
	Mulmur Tp	2,774
	Newbury V	427
	North Algona-Wilberforce Tp	2,508
	North Frontenac Tp	1,659
	North Huron Tp	4,936
	North Kawartha Tp	2,058
	Northern Bruce Peninsula M	3,436
	Oil Springs V	736
	Perth South Tp	4,307
	Petrolia T	4,750
	Point Edward V	2,171
	Shelburne T	3,663
	Southwold Tp	4,396
	Stirling-Rawdon Tp	4,566
	Tudor and Cashel Tp	607
	Tyendinaga Tp	3,457
	Warwick Tp	3,983
	Westport V	610
	Wollaston Tp	664
5,000 to 9,999	Adjala-Tosorontio Tp	9,750
	Alfred and Plantagenet Tp	8,290
	Alnwick-Haldimand Tp	5,392
	Arnprior T	6,596
	Arran-Elderslie M	6,247
	Ashfield-Colborne-Wawanosh Tp	5,360
	Augusta Tp	7,261
	Aylmer T	6,440
	Bayham M	5,679
	Beckwith Tp	5,404
	Blandford - Blenheim Tp	7,502
	Bluewater M	6,680
	Brighton M	8,184
	Brockton M	9,483
	Carleton Place T	8,310
	Cavan-Millbrook-North Monaghan Tp	7,735
	Central Huron M	7,430
	Champlain Tp	8,620
	Chatsworth Tp	5,924
	Cramahe Tp	5,160
	Douro-Dummer Tp	6,455

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
5,000 to 9,999	Drummond-North Elmsley Tp	6,181
	East Zorra - Tavistock Tp	7,133
	Edwardsburgh/Cardinal Tp	6,169
	Elizabethtown-Kitley Tp	9,555
	Georgian Bluffs Tp	9,869
	Goderich T	7,383
	Gravenhurst T	9,090
	Grey Highlands M	8,154
	Hamilton Tp	9,819
	Hanover T	6,585
	Huron East M	9,427
	Huron-Kinloss Tp	5,879
	Laurentian Valley Tp	8,715
	Leeds and the Thousand Islands Tp	8,720
	Malahide Tp	8,081
	Mapleton Tp	8,295
	McNab-Braeside Tp	6,351
	Meaford M	9,871
	Minto T	7,320
	Mono T	6,329
	Muskoka Lakes Tp	5,456
	North Dumfries Tp	8,122
	North Middlesex M	6,693
	North Stormont Tp	6,554
	Otonabee-South Monaghan Tp	6,211
	Penetanguishene T	7,982
	Perth T	5,694
	Plympton-Wyoming T	7,126
	Puslinch Tp	5,034
	Ramara Tp	8,441
	Renfrew T	7,565
	Rideau Lakes Tp	9,289
	South Bruce M	5,987
	South Huron M	9,896
	South-West Oxford Tp	7,727
	Southgate Tp	6,070
	Southwest Middlesex M	5,951
	Stone Mills Tp	6,852
	Tay Tp	9,209
	Tay Valley Tp	5,239
	The Blue Mountains T	5,443
	The South Bruce Peninsula T	7,489
	Tiny Tp	9,114
	Tweed M	5,193
	Wainfleet Tp	6,101

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
5,000 to 9,999	Wellesley Tp	8,688
	West Elgin M	5,338
	West Perth M	8,876
	Whitewater Region Tp	6,185
	Zorra Tp	8,093
10,000 to 19,999	Amherstburg T	19,600
	Bracebridge T	12,133
	Brock Tp	11,744
	Central Elgin M	11,736
	Clarence-Rockland C	18,557
	Clearview Tp	13,138
	Cobourg T	15,697
	Collingwood T	15,993
	East Gwillimbury T	19,324
	Erin T	10,195
	Essa Tp	16,210
	Essex T	19,205
	Greater Napanee T	13,682
	Grimsby T	19,567
	Guelph/Eramosa Tp	10,272
	Hawkesbury T	10,154
	Huntsville T	15,086
	Ingersoll T	10,634
	Kincardine M	10,948
	King Tp	17,948
	Kingsville T	18,684
	Lambton Shores M	10,565
	Lincoln T	18,830
	Loyalist Tp	12,779
	Middlesex Centre Tp	13,788
	Midland T	16,110
	Mississippi Mills T	10,897
	Niagara-on-the-Lake T	13,087
	North Dundas Tp	10,497
	North Glengarry Tp	10,550
	North Grenville Tp	12,253
	North Perth T	11,493
	Norwich Tp	10,226
	Oro-Medonte Tp	17,504
	Owen Sound C	19,870
	Pelham T	14,683
	Perth East Tp	11,774

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
10,000 to 19,999	Petawawa T	15,148
	Port Colborne C	17,819
	Port Hope M	14,561
	Russell Tp	11,894
	Saugeen Shores T	11,095
	Scugog Tp	19,428
	Severn Tp	10,907
	Smith-Ennismore-Lakefield Tp	15,394
	South Dundas Tp	10,159
	South Frontenac Tp	14,707
	South Glengarry Tp	12,289
	South Stormont Tp	11,633
	Springwater Tp	15,281
	St. Clair Tp	14,796
	Strathroy-Caradoc Tp	18,001
	Thames Centre M	11,880
	The Nation M	10,366
	Thorold C	17,682
	Tillsonburg T	13,721
	Trent Hills M	11,962
	Uxbridge Tp	16,752
	Wasaga Beach T	11,308
	Wellington North Tp	10,457
	West Grey M	11,074
	West Lincoln Tp	11,415
	Wilmot Tp	14,428
	Woolwich Tp	17,537
20,000 to 39,999	Aurora T	36,483
	Bradford-West Gwillimbury T	20,513
	Centre Wellington Tp	21,622
	Fort Erie T	27,291
	Georgina T	35,035
	Innisfil T	26,714
	LaSalle T	23,189
	Lakeshore T	27,410
	Leamington M	24,768
	Milton T	31,369
	New Tecumseth T	24,643
	Orangeville T	21,620
	Tecumseh T	24,486
	Whitchurch - Stouffville T	20,112
	Woodstock C	32,474

SOUTH

Lower-tiers	Municipality	2002 Enumerated population
40,000 to 99,999	Ajax T	66,958
	Caledon T	44,820
	Clarington M	62,469
	Halton Hills T	44,725
	Newmarket T	60,479
	Niagara Falls C	75,585
	Pickering C	81,477
	Sarnia C	69,850
	Waterloo C	87,874
	Welland C	46,965
	Whitby T	81,172
100,000+	Brampton C	280,101
	Burlington C	140,288
	Cambridge C	103,425
	Kitchener C	177,858
	Markham T	182,110
	Mississauga C	549,218
	Oakville T	132,696
	Oshawa C	133,544
	Richmond Hill T	110,160
	St. Catharines C	125,375
	Vaughan C	152,519

List of Web Sites

The following web sites contain useful supplementary information.

Ministry of Municipal Affairs

Visit the home page of the Ministry of Municipal Affairs and click on "Municipal Performance Measurement Program" for information on the program. Includes archives.

www.mah.gov.on.ca

Association of Municipal Managers, Clerks and Treasurers of Ontario

AMCTO serves those in professions directly related to municipal government. AMCTO promotes expertise relevant to the skills, knowledge and teamwork required to foster administrative excellence in municipal government.

www.amcto.com

Association of Municipalities of Ontario (AMO)

The Association of Municipalities of Ontario (AMO) works with and for municipal governments. AMO's traditional activities include inter-government relations and policy development, information gathering and disseminating on all issues affecting municipalities.

www.amo.on.ca

Click "More on AMO" and "Ontario Municipalities" for a list of municipalities by region, county and district.

Corporations Supporting Recycling (CSR)

CSR is a Canadian, not-for-profit, private sector organization that works with all levels of government, particularly municipalities, as well as non-government organizations and other industry groups to help develop sustainable municipal recycling and waste diversion systems.
Click on "GAP" for generally accepted principles. These principles were used to measure municipal waste flow for the solid waste performance measures.

www.csr.org

Municipal Finance Officers Association of Ontario (MFOA)

MFOA is the professional association of municipal finance officers in the Province of Ontario. MFOA promotes the interests of its members in carrying out their statutory and other financial responsibilities by initiating studies and sponsoring seminars to review, discuss and develop positions on important policy and financial management issues.

www.mfoa.on.ca

Ontario Centre for Municipal Best Practices (OCMBP)

The Ontario Centre for Municipal Best Practices is a partnership, formed in 2002, between the Association of Municipalities of Ontario and the Ontario Ministry of Municipal Affairs. It is developing a virtual electronic library of municipal best practices.

http://www.municipalbestpractices.ca/home.asp

Ontario Good Roads Association (OGRA)

The Ontario Good Roads Association represents the transportation and public works-related concerns of all municipalities and many of the First Nations communities of Ontario. For over 100 years, this association has aided municipalities in their efforts to provide efficient and effective transportation systems.

www.ogra.org

Ontario Municipal CAO's Benchmarking Initiative (OMBI)

The Ontario Municipal CAO's Benchmarking Initiative is a partnership project to push for service excellence in municipal government. Participating municipalities are working together to identify and share performance statistics, operational best practices and to network in a spirit of innovation and entrepreneurship to push for even greater successes.

www.ombi.ca

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Programme de mesure de la performance des services municipaux : manuel

Municipal
Performance
Measurement
Program

Summary of 2002 Results